

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
28 March 2002 (28.03.2002)

PCT

(10) International Publication Number
WO 02/24722 A2

(51) International Patent Classification⁷: C07K (74) Agent: WEBB, Cynthia; Webb, Ben-Ami & Associates, P.O. Box 2189, 76121 Rehovot (IL).

(21) International Application Number: PCT/IL01/00871 (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(22) International Filing Date: 16 September 2001 (16.09.2001) (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(25) Filing Language: English (72) Inventors; and

(26) Publication Language: English

(30) Priority Data: 60/233,665 19 September 2000 (19.09.2000) US

(71) Applicant (for all designated States except US): PRO-CHON BIOTECH LTD. [IL/IL]; Kiryat Weizmann Science Park, P.O. Box 1482, 76114 Rehovot (IL).

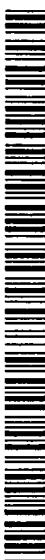
(72) Inventors; and

(75) Inventors/Applicants (for US only): YAYON, Avner [IL/IL]; Moshav Siria # 104, 76834 (IL). HECHT, Hans-Juergen [DE/DE]; Erlenkamp 25, 38126 Braunschweig (DE). BOGIN, Oren [IL/IL]; Pinsker Street 11, 76308 Rehovot (IL). WEICH, Herbert [DE/DE]; Pestalozzistr. 16, 38300 Wolfenbuttel (DE). ADAR, Rivka [IL/IL]; Apt. 6, David Bazov Street 9, 58497 Holon (IL).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 02/24722 A2

(54) Title: CRYSTALLINE FGF9 DIMER AND METHODS OF USE

(57) Abstract: The crystal structure of FGF9 has been determined and is shown to exist in a tetragonal space group I4₁ with lattice constants $a = 151.9 \text{ \AA}$ and $c = 117.2 \text{ \AA}$. The crystal may be refined to an R value of $R = 22.0\%$ at 2.6 \AA resolution. The crystal may be used in drug screening assays. A three-dimensional model of FGF9 is also disclosed, as is a three-dimensional computer image of the three-dimensional structure of FGF9, computer-readable data storage medium encoded with computer-readable data corresponding to the three-dimensional computer image, as well as computers for producing such a three-dimensional representation.

WO 02/24722

PCT/IL01/00871

CRYSTALLINE FGF9 DIMER AND METHODS OF USE

FIELD OF THE INVENTION

The present invention relates to certain crystallized fibroblast growth factor 9 (FGF9) dimers. This invention also relates to computational methods for using structure coordinates of the protein complex to screen for and design compounds that interact with FGF9 or homologs thereof and methods of using the crystal structure of FGF9 to design pharmaceuticals.

BACKGROUND OF THE INVENTION

10 Fibroblast growth factors (FGFs) constitute a family of at least twenty structurally related, heparin binding polypeptides which are expressed in a wide variety of cells and tissues. They stimulate the proliferation of cells from mesenchymal to epithelial and neuroectodermal origin. FGFs share structural similarity, but differ in their target specificity and spatial and temporal expression pattern. The biological response of cells to FGF is mediated through specific, high affinity (K_d 20-500 pM) cell surface receptors that possess intrinsic tyrosine kinase activity and are phosphorylated upon binding of FGF (Coughlin et al 1988). A lower affinity (K_d 2×10^9 M), large capacity (10^6 sites/cell), class of binding sites has also been identified as heparin sulfate moieties of proteoglycans. Heparin sulfates are 15 ubiquitous polysaccharides, composed of repeating disaccharides of variably sulfated, either glucuronate or iduronate and glucosamine residues, arranged in distinct domains which greatly vary in length and sulfation levels. A unique role for these molecules is 20 in the formation of distinct complexes, essential for high affinity binding and

WO 02/24722

PCT/IL01/00871

activation of FGF in particular and of other heparin-binding growth factors in general (Yayon et al, 1991; Rapraeger et al 1991).

Ligand and receptor dimerization is a key event in the transmembrane signaling of receptor tyrosine kinases. Receptor dimerization leads to an increase in 5 kinase activity, resulting in autophosphorylation and the induction of diverse biological responses (Schlessinger et al, 1992). Several models have been proposed for the interaction between FGF2-heparin and its receptor (Yayon et al, 1991; Ruoslahti 1991; Spivak-Kroizman et al; 1994, Kan et al; 1993, Guimond 1993; Pantoliano et al, 1994). Previous work utilizing NMR demonstrated that FGF dimers 10 in a symmetric tetramer are formed in the presence of an active heparin decasaccharide (Moy et al, 1997), suggesting that a cis-oriented dimer is the minimal, biologically active structural unit of FGF2. Using defined heparin fragments and soluble FGF receptors further demonstrated that ligand dimerization can significantly enhance binding of FGF2 to FGFR1, dimerization of the receptor and induction of downstream 15 signal transduction pathways. More recently, several studies (Plotnikov et al, 1999; Stauber et al, 2000; Plotnikov et al, 2000) exploring the crystal structure of a complex between FGF2 and FGF1 with the extracellular domains of FGFR1 and FGFR2 have shown a 1:2 molecular ratio of ligands to receptors with no evidence for ligand dimerization, the biological relevance of which has still to be determined.

20 FGFs share in their primary sequence a homology core of around 120 amino acids, including four cysteine residues, one of which is conserved in all members of the family. The core structure contains 12 antiparallel β strands, organized into a threefold internal symmetry. Equivalent folds have been observed for

WO 02/24722

PCT/IL01/00871

the soybean trypsin inhibitor and interleukin IL-1a and b. The best characterized members of the family are FGF1 (aFGF) and FGF2 (bFGF), the structures of which have been determined (Zhang et al, 1991; Zhu et al, 1991). Both are potent mitogens that stimulate proliferation, migration and differentiation of a large variety of cells

5 (Folkman et al, 1987; Rifkin et al, 1989).

FGF9, a recently identified member of the FGF family was originally discovered as a heparin binding glia activating factor (Miyamoto et al, 1993; U.S. patents 5,622,928 and 5,512,460). Human FGF9 codes for a 208 amino acid protein. It shares a 30% overall sequence identity with other FGFs but has a unique spectrum

10 of target cell specificity as it stimulates the proliferation of glia and other fibroblast-like cells but is not mitogenic for endothelial cells (Naruo et al, 1993). The basis for such cell selectivity resides in its differential capacity to bind the different FGF receptors. Recombinant FGF9 binds with high affinity and in a heparin dependent manner to FGFR3, with somewhat less affinity to FGFR2 and with considerably less

15 to FGFR1 (Hecht et al, 1995).

Mutations in FGFR3 have been shown to be responsible for achondroplasia, the most common form of genetic dwarfism. Examination of the sequence of FGFR3 in achondroplasia patients identified a mutation in the transmembrane domain of the receptor.

20 As reported in WO 96/41523, the entire contents of which are hereby incorporated herein by reference, FGF9 not only specifically binds to the FGFR3, but also specifically activates this receptor without activating the FGFR1 and FGFR4 receptors and, if appropriate concentrations are chosen, without significantly activating

WO 02/24722

PCT/IL01/00871

FGFR2. Thus, a pharmaceutical composition comprising a pharmaceutically acceptable carrier and, as an active ingredient, a therapeutically effective amount of FGF9, may be used for stimulating the activity of FGFR3. Similarly, if antagonists of FGF9 could be found, pharmaceutical compositions containing such antagonists could 5 be used to attenuate the activity of FGFR3.

Normal cartilage and bone growth and repair of damage to the cartilage and bone requires a specific and delicate balance between up regulation and down regulation of the activity of the FGFR3. It has been theorized that active FGFR3 is necessary in the initial stages of cartilage-bone differentiation, and, after 10 differentiation, is required for cartilage-bone repair. Thus, a pharmaceutical composition comprising as an active ingredient FGF9, which stimulates the activity of FGFR3, may be used in order to encourage cartilage and bone repair, for example by administration to the site of injury. Furthermore, FGFR3 exists usually temporarily on mesenchymal stem cells and usually disappears after differentiation. Administration 15 of FGF9 may serve to stabilize FGFR3 and thus prolong the period in which it is active prior to differentiation. FGF9 has also a chemotactic affect of FGFR3-carrying cells and can promote migration of such FGFR3 carrying cells, typically mesenchymal stem cells, to a desired site, for example, by injection of FGF9 to the growth plate top of the column.

20 According to this theory, overactivation of FGFR3 after the stage of initial differentiation of bone and cartilage cells, leads to halted growth, and is probably the cause of achondroplasia. Thus, a pharmaceutical composition comprising as an active ingredient an antagonist of FGF9 which attenuates the activity

WO 02/24722

PCT/IL01/00871

of FGFR3, or comprising an FGF9 binding agent (such as an antibody against FGF9), which neutralizes native circulating FGF9, should be used in cases of overactivity of the FGFR3 receptor in differentiated tissues, which causes bone and cartilage growth arrest. Such bone and cartilage growth arrest may lead to achondroplasia dwarfism, or 5 other abnormalities of bone and cartilage growth, for example, multiple hereditary exostosis, solitary hereditary exostosis, hallux valgus deformity, synovial chondromatosis and endochondromas.

The above conditions may be treated with a pharmaceutical composition comprising either an antagonist of FGF9, or an FGF9 binding agent 10 capable of neutralizing native circulating FGF9, which both serve to attenuate the activity of FGFR3.

Thus, FGF9 agonists can be used for the purpose of repair and regeneration of defective articular cartilage, for treatment of achondroplastic patients, for treatment of patients suffering from other growth disturbances and for treatment of 15 physical injuries with poor predicted rate of cartilage and bone growth. They may also be used as interventions for manipulating the rate of growth within growth plates in order to increase the growth rate and/or prevent premature differentiation; or may be used for direct injection into the nucleus pulposus of the fine vertebrae in order to enhance the healing of spine injuries. FGF9 antagonists can be used to suppress the 20 activity of a wild type FGFR3 receptor, for example, in the cases of various types of tumors and the like. See WO 96/41620.

WO 02/24722

PCT/IL01/00871

As there is a need for compounds that selectively inhibit FGFR3 or act as a selective agonist for FGFR3, it would be desirable to have improved methods that facilitate the design of such compounds.

The concept of rational drug design involves obtaining the precise 5 three-dimensional molecular structure of a specific protein to permit design of drugs that selectively interact with and adjust the function of that protein. Theoretically, if the structure of a protein having a specified function is known, the function of the protein can be adjusted as desired. This permits a number of diseases and symptoms to be controlled. For example, CAPTOPRIL is a well known drug for controlling 10 hypertension that was developed through rational drug design techniques.

CAPTOPRIL inhibits generation of the angiotension-converting enzyme, thereby preventing the constriction of blood vessels. The potential for controlling disease through drugs developed by rational drug design is tremendous. The power of rational drug design has been reviewed by Bugg et al (1993).

15 A requirement of rational drug design is the production of crystals of the desired target protein which provide for the determination of the detailed atomic structure of both the parent protein and its complex with the pharmaceutical. For this purpose, knowledge of the three-dimensional structure coordinates of FGF9 would be useful. Such information would aid in identifying and designing potential inhibitors 20 and agonists of FGFR3 that in turn are expected to have therapeutic utility.

WO 02/24722

PCT/IL01/00871

SUMMARY OF THE INVENTION

The present invention provides crystallized FGF9. The structure coordinates reveal that the crystalline FGF9 shows a symmetric dimer with unique receptor and heparin binding surfaces. FGF9 crystallized in the tetragonal space group 5 I4₁ with lattice constants a=151.9 Å, c=117.2 Å. The structure has been refined to an R-value of R=22.0% (R_{free}= 25.2%) at 2.6 Å resolution. The four molecules in the asymmetric unit are arranged in two non-crystallographic dimers with the dimer interface composed partly of residues from N- and C-terminal extensions from the FGF-core structure. Most of the receptor-binding residues identified in FGF1- and 10 FGF2-receptor complexes are buried in the dimer interface with the β8/β9 loop stabilized in a particular conformation by an intramolecular hydrogen bonding network. The potential heparin binding sites are in a pattern distinct from FGF1 and FGF2. The carbohydrate moiety attached at N79 has no structural influences.

The use of the crystal structure to design candidate agonists and 15 antagonists of the FGFR3 may be accomplished in the following fashion. Once the crystal structure of the target (i.e., FGF9) is determined, computer modeling is conducted (using such programs as DOCK (Kuntz et al, 1982) or Multiple Copy Simultaneous Search (MCSS)(Mirankev et al, 1991)) to construct candidate agonist or antagonist compounds based on the crystal structure. These compounds are 20 chemically synthesized and their biological activity is assayed. Preferably, such agonists or antagonists are mutants or fragments of FGF9 itself. For example, a preferred antagonist would be a mutant of FGF9 designed by computer modeling

WO 02/24722

PCT/IL01/00871

based on the crystal structure of FGF9, which mutant bonds to the FGFR3 receptor without activating it.

Furthermore, once the three-dimensional structure of a crystal comprising the FGF9 protein is determined, a potential ligand (antagonist or agonist) 5 is examined through the use of computer modeling using a docking program such as GRAM, DOCK, or AUTODOCK (Dunbrack et al, 1997). This procedure can include computer fitting of potential ligands to the FGF9 dimer to ascertain how well the shape and the chemical structure of the potential ligand will complement or interfere with the dimer-dimer interaction (Bugg et al, 1993; West et al 1995)). Computer 10 programs can also be employed to estimate the attraction, repulsion, and stearic hindrance of the ligand to the dimer-dimer binding site. Generally, the tighter the fit (e.g., the lower the stearic hindrance, and/or the greater the attractive force), the more potent the potential drug will be since these properties are consistent with a tighter binding constant. Furthermore, the more specificity in the design of a potential drug, 15 the more likely that the drug will not interfere with other properties of the FGF9 protein. This will minimize potential side effects due to unwanted interactions with other proteins.

Initially a potential ligand could be obtained by screening a random peptide library produced by recombinant bacteriophage for example, (Scott et al, 1990; 20 Cwirla et al, 1990; Devlin et al, 1990) or a chemical library. A ligand selected in this manner could then be systematically modified by computer modeling programs until one or more promising potential ligands are identified. Such analysis has been shown

WO 02/24722

PCT/IL01/00871

to be effective in the development of HIV protease inhibitors (Lam et al, 1994; Wlodawer et al, 1993; Appelt, 1993; Erickson, 1993).

Such computer modeling allows the selection of a finite number of rational chemical modifications, as opposed to the countless number of essentially 5 random chemical modifications that could be made, and of which any one might lead to a useful drug. Each chemical modification requires additional chemical steps, which while being reasonable for the synthesis of a finite number of compounds, quickly becomes overwhelming if all possible modifications needed to be synthesized. Thus, through the use of the three-dimensional structure disclosed herein and 10 computer modeling, a large number of these compounds can be rapidly screened on the computer monitor screen, and a few likely candidates can be determined without the laborious synthesis of untold numbers of compounds.

Once a potential ligand (agonist or antagonist) is identified it can be either selected from a library of chemicals as are commercially available from most 15 large chemical companies including Merck, Glaxo Welcome, Bristol Meyers Squib, Monsanto/Searle, Eli Lilly, Novartis and Pharmacia UpJohn, or alternatively the potential ligand may be synthesized *de novo*. As mentioned above, the *de novo* synthesis of one or even a relatively small group of specific compounds is reasonable in the art of drug design. The prospective drug can be physically tested to confirm its 20 projected activity. For example, if the activity sought for such a potential ligand is its ability to prevent the binding of FGF9 to its receptor FGFR3, the potential ligand can be placed into any standard binding assay described below to test its effect on the FGF9-FGFR3 interaction. A preferred ligand for the purpose of this assay would be

WO 02/24722

PCT/IL01/00871

one which is capable of binding to FGFR3 with a greater affinity than that of FGF9 for FGFR3. If the assay is conducted with FGFR3 on the surface of living cells, then one can determine whether or not the ligand which binds to FGFR3 causes signaling by the receptor. If it binds but does not cause signaling, then it is an antagonist. If it binds 5 and causes signaling, then it is an agonist.

If the activity sought for such a potential ligand is its ability to bind directly to FGF9, this activity can be detected by means of a standard binding assay whereby the potential ligand may be selected on the basis of its having the capability of binding to FGF9. An antagonist may also be a ligand which binds to FGF9 so as to 10 prevent FGF9 from binding to FGFR3. The ability of the potential antagonist to have this activity may also be detected by means of a simple assay for binding to FGF9 in the presence of FGFR3, as is well known in the art.

Other assays which can be conducted for potential ligands relate to the effect of heparin on FGF9. Potential ligands which interact with the heparin binding 15 pockets of FGF9 may have a significant effect on the activity of FGF9, such as by preventing the heparin-dependent oligomerization thereof. Thus, once a potential ligand which may affect the heparin binding property of FGF9 is selected by means of computer modeling, the ability of the potential ligand to actually interfere with such binding may be determined in a standard binding assay to test its effect on the FGF9- 20 heparin interaction.

When a suitable drug is identified, a supplemental crystal can be grown which comprises a protein-ligand complex formed between the FGF9 protein and the drug. Preferably the crystal effectively diffracts X-rays allowing the determination of

WO 02/24722

PCT/IL01/00871

the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Å, more preferably greater than 3.0 Å, and even more preferably greater than 2.0 Å. The three-dimensional structure of the supplemental crystal can be determined by Molecular Replacement Analysis. Molecular replacement involves using a known

5 three-dimensional structure as a search model to determine the structure of a closely related molecule or protein-ligand complex in a new crystal form. The measured X-ray diffraction properties of the new crystal are compared with the search model structure to compute the position and orientation of the protein in the new crystal.

Computer programs that can be used include: X-PLOR and AMORE (Navaza, 1994).

10 Once the position and orientation are known an electron density map can be calculated using the search model to provide X-ray phases. Thereafter, the electron density is inspected for structural differences and the search model is modified to conform to the new structure. Other computer programs that can be used to solve the structures of such crystals include QUANTA, CHARMM, INSIGHT, SYBYL, MACROMODE,

15 and ICM.

For all of the drug screening assays described herein further refinements to the structure of the drug will generally be necessary and can be made by the successive iterations of any and/or all of the steps provided by the particular drug screening assay.

20 **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 is a ribbon representation of the FGF9 dimer composed of chains A and D showing the carbohydrate moiety bound to each of the chains.

WO 02/24722

PCT/IL01/00871

Figure 3 shows the hydrogen bond network stabilizing the β 8/ β 9 loop.

Molecule D is represented with the light colored chain on the left side of the figure, molecule A with darker chain trace on the right side of the figure.

Figure 4 shows a diagram of a system used to carry out the instructions
5 encoded by the storage medium of Figure 4A and 4B.

Figure 5A shows a cross-section of a magnetic storage medium.

Figure 5B shows a cross-section of an optically-readable data storage
medium.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

10 Overall Structure Description

The core unit of the FGF9 structure (Fig. 1) is formed by residues 62 to 193 and is very similar to the structures of FGF1 and FGF2, as expected from the sequence alignment (Plotnikov et al. 1999). Further features of the schematic representation of the FGF9 dimer are expanded upon in the inventors' recent 15 publication (Hecht et al. 2001 Acta Cryst. D57). The rms difference to Ca-atoms of FGF1 (Blaber et al, 1996, and pdb-id 2afg) and FGF2 (Zhang et al, 1991, and pdb-id 2FGF) is 0.8 Å. Major differences (rmsd > 1.5 Å) occur at Thr70/Gly71, where FGF1 and FGF2 have an additional glycine, at the loop Asp88/Ser90, which may be correlated with the C-terminal extension in FGF9, and at Tyr153/Arg161, where in 20 FGF9 an insertion of three (relative to FGF1) or five (relative to FGF2) residues occurs. The loop Glu141/Asn146 shows some variability already in FGF1 and FGF2. Compared to FGF1 the largest difference in Ca-positions in this loop is 3.9 Å (at Ala142) while the largest difference is 1.9 Å (at Ala142) compared to FGF2. The loop

WO 02/24722

PCT/IL01/00871

containing in FGF9 the glycosylation site at Asn79 is identical to that of FGF1 and FGF2. N-terminal sequencing and Maldi-mass-spectrometry indicated heterogeneity of the crystallized protein with the major components starting at residues 19, 34, 38, and 42. In the structure, residues become visible in one of the molecules at residue 45

5 with three flexible residues in an extended conformation turning into a helix between residues 48-62. In the other three molecules of the asymmetric unit the helical part is visible only from residue 52 onward. The C-terminal residues starting from residue 193 form an irregular helix which shows some variability in the four molecules of the asymmetric unit. Together these N- and C-terminal parts form an extension clearly

10 separate from the core structure.

Quaternary Structure

There is increasing evidence for the capacity of FGFs to undergo either spontaneous or heparin induced oligomerization, although the relation of such dimers and higher order oligomers to receptor binding and activation is still unclear. For

15 FGF1 a heparin-linked dimeric structure has been reported (DiGabriele et al, 1998) while for FGF2 in the presence of heparin both monomeric and dimeric structures were observed (Faham et al, 1996). Moreover, chemical cross linking, ultracentrifugation experiments (Herr et al, 1997) and mass spectrometric techniques (Davis et al, 1999) provided evidence of self-oligomerization for FGF2 in the presence

20 and in the absence of heparin. Nevertheless, in the structures of the FGF2 receptor complex (Plotnikov et al, 1999) and the FGF1 receptor complex (Stauber et al, 2000) both FGF molecules are separate and only linked via the receptor molecules. In these structures heparin is postulated to bind into a positively charged groove, created in the

WO 02/24722

PCT/IL01/00871

receptor dimer with the two termini bound to the heparin-binding domains of the FGF2 molecules (Plotnikov et al, 1999, Stauber et al, 2000).

FGF9 readily dimerizes under physiological conditions, probably more easily than other FGFs, and dimers of FGF9 are frequently observed by immunoblotting lysates of RCJ3.1C5.18 mesenchymal cells (Garofalo et al, 1999) and L-8. Accordingly, the FGF9 structure, crystallized in the absence of heparin, shows the four molecules of the asymmetric unit organized in two dimers related by non-crystallographic symmetry. The solvent accessible surface area, calculated with Grasp (Nicholls et al, 1991), varies between 8848 Å² and 9306 Å² for the individual molecules, depending on the length of the extensions. The surface areas of the dimeric molecules, chains AD and BC, are 15826 Å² and 15481 Å², yielding buried surface areas of 2422 Å² and 2420 Å² or approximately 1200 Å² per chain, well above the cutoff value of 400 Å² per chain used as one of the classification criteria by the Protein Quaternary Structure server PQS (<http://pqs.ebi.ac.uk/pqs-doc/pqs-doc.shtml>).

More than half of this buried surface of the dimer is contributed by the N- and C-terminal extensions, as the buried area per dimer is reduced to 1040 Å² and 853 Å² when only the residues 62-193 of the FGF-core structure are used in the calculation. The lack of these structured terminal extensions therefore can be one of the reasons why similar dimer formation has not been observed, in the absence of heparin, in the FGF1 and FGF2 structures. For FGF2 the crystal structure with the highest resolution (pdb-id 1bgf) showed disorder for the N-terminal first 19 to 20 residues (Ago et al, 1991), confirmed by NMR studies of complete FGF2 (Lozano et al, 1998; pdb-id 1rml) which showed disorder for the N-terminal 28 residues (Moy et al 1996). For

FGF1 the crystal structure with the highest resolution (Blaber et al, 1996) showed disorder for the N-terminal 9-10 residues (Blaber et al, 1996; pdb-id 2afg) and for the NMR structure a N-terminally at residue 25 truncated molecule was used (Lozano et al, 1998; pdb-id 1rml).

5 Dimer Interface

The dimer interface in FGF9 consists mainly of hydrophobic contacts but includes 4 hydrogen bonds and two salt bridges, related by non-crystallographic two-fold symmetry. The hydrogen bonds connect the side chain of Y67 with the side chain of N143 and the side chain of R64 with the backbone carbonyl of V192 where 10 the C-terminal extension starts, while the salt bridges connect R62 with D193, also at the start of the C-terminal extension. The hydrophobic contacts are concentrated in a prominent hydrophobic cluster of the residues L54, L57, I60, L61, P194, V197 and L200 at the base of the structure, close to where the terminal extensions join the core. At the center and top of the core structure P191, L188 together with P189 and the 15 hydrophobic parts of the side chains of R190, W144 and Y145 form an additional, though less pronounced hydrophobic patch. A potentially important structural difference between FGF9 and FGF1 and FGF2 occurs in the dimer interface with the noticeable shift of the β -turn linking β 8 and β 9 (residues 139-146, corresponding to 96-104 in FGF2). In FGF9, the loop conformation is fixed by a hydrogen bond 20 network involving residues H181, H186, E141 and E142 (Fig. 3). The arrangement is stabilized further by a salt bridge between E142 and R69. Residues from this loop have been implicated in receptor binding (Venkataraman et al, 1999) and in the experimental FGF receptor complexes, where residues from this loop make extensive

WO 02/24722

PCT/IL01/00871

contacts to the receptor, the loop has been found to undergo some conformational change upon receptor binding (Plotnikov et al, 1999; Stauber et al, 2000). This conformational adaptation is likely to be much reduced in FGF9 due to the hydrogen bonding network. Stabilization of this loop in a particular conformation by residues 5 not directly involved in receptor binding, as in FGF9, therefore could have significant implications on receptor affinity. In the structure of FGF7 (Ye et al, 1999, pdb-id 1QQK), where E142 and R69 are conserved, the loop is in a conformation similar to FGF1 and FGF2 but lacks the salt bridge. Most likely the loop conformation in FGF9 is influenced by the hydrogen bond between E141 and H181, which is unique to FGF9 10 and FGF16. Similar interactions could occur in FGF5, which has two glutamines in these places, and in FGF10, which has glutamic acid and lysine.

With the exception of residues from the terminal extensions most of the residues (Fig. 1) involved in the dimer interface in FGF9 correspond to residues identified as belonging to the major receptor binding sites in FGF2 (Venkataraman et 15 al, 1999; Plotnikov et al, 1999; Stauber et al, 2000; Plotnikov et al, 2000). This is particularly true for residues Y67, Y145, L188, I60 and H186, corresponding in FGF2 to Y24, Y103, L140, F17 and L138 and in FGF1 to residues Y15, Y94, L133, Y8 and L131 which were found by Plotnikov et al, 1999, and Stauber et al, 2000, to be in contact with the receptor. These residues are almost completely buried (less than 10 20 Å² solvent accessible surface, calculated with Areaimol (CCP4, 1994)) in the FGF9 dimer interface and, in order for them to become accessible to the receptor molecule, dissociation of these pre-formed dimers has to occur at least in FGF9.

WO 02/24722

PCT/IL01/00871

In the experimental FGF receptor complexes (Plotnikov et al, 1999; Stauber et al, 2000) both the FGF ligand molecules are separate and linked only by heparin via the receptor molecules. A complete separation of the FGF9 dimer requires the separation of the extensive hydrophobic interactions at the N- and C-terminal 5 extensions. As it seems unlikely that these hydrophobic residues remain exposed to solvent, at least three alternative scenarios can be proposed.

1. At present there is no experimental evidence that residues outside of the core-FGF structure participate in receptor binding although in the FGF1/FGFR2 complex both FGF termini are in the vicinity of the receptor. In addition, preliminary 10 results suggest that a complete deletion of both termini may have no apparent functional implications as evidenced by the capacity of a truncated form to both bind receptor and induce cell proliferation (Adar et al, in preparation). The function of these terminal residues could be therefore to provide stability to the unliganded FGF-molecules, probably correlated with the function as a non-cleaved secretion signal 15 attributed to the 60 N-terminal residues by Revest et al (1999), but become redundant and flexible at receptor binding. It is intriguing to suggest that the observed heparin-independent self association of FGF9 could have physiological significance by rendering the non-receptor bound FGF in a protected, non active form by utilizing the same residues defined for receptor binding for a homotypic dimer interface.

20 2. These residues remain as a connecting region between the FGF molecules after a conformational change that exposes the buried receptor binding residues. Preliminary modeling suggests that this could be possible with hinge regions

WO 02/24722

PCT/IL01/00871

probably in the area of residues 62 and 190-192. In this case the terminal extensions could connect adjacent ligand/receptor complexes to form multimeric assemblies.

3. In the experimental receptor/ligand complexes (Plotnikov et al, 1999, Stauber et al, 2000) the secondary receptor binding sites are different from the 5 sites identified by site directed mutagenesis as influencing receptor binding (Springer et al, 1994, Zhu et al, 1997, Zhu et al, 1998). This discrepancy presently is not clear and may point to the involvement of other determinants in FGF in receptor binding and activation.

At least some of the FGFs, especially FGF3 and FGF16, show in the 10 sequence alignment a similar pattern of hydrophobic and hydrophilic residues in these terminal extensions. However, due to the high sequence diversity and the structural flexibility, still more structural investigations of these homologs is yet required.

Potential Heparin Binding Sites

Heparin binding sites have been structurally identified in the heparin 15 linked FGF1 dimer (DiGabriele et al, 1998; pdb-id 2axm) and in heparin complexes with FGF2 monomers (Faham et al, 1996; pdb-id 1bfb) where prominently interactions of basic residues with the sugars, sulphate or carboxylate groups are involved. The surface of FGF9 contains three clusters of basic residues potentially 20 suitable for heparin binding. At least one of these sites contains a bound sulphate molecule while in the other cases the discrimination between bound water and sulphate is less certain due to the limited resolution. The first site is in a pocket created by the insertion at Tyr153/Arg161 and the sulphate ion is bound to R180, Y163 and the backbone nitrogen of R161. This pocket is at approximately 14 Å

WO 02/24722

PCT/IL01/00871

distance from the nearest heparin binding site in FGF1 and FGF2 but could occur also in FGF16, FGF13 and FGF11 which have a highly homologous insertion and identical or homologous residues in position 163 and 180. The second site, where R137, K154 and R161 form a cluster highly suggestive of sulphate binding, is even further away

5 from the FGF1 and FGF2 homologous sites and is located almost on the opposite side of the molecule. A similar arrangement could occur in FGF16 as well, where R161 is replaced by a glutamine. The third site is formed by R173 and R177 which correspond to K118 and R122 in the heparin binding loop in FGF1 (DiGabriele et al, 1998; pdb-id 2axm) and to K125 and K129 in FGF2 (Faham et al, 1996; pdb-id 1bfb).

10 Fitting the heparin structures observed in FGF1 (DiGabriele et al, 1998) and FGF2 (Faham et al, 1996) to FGF9, however, shows that the high affinity heparin binding site described by the residues N28, K126 and Q135 in FGF2 (Faham et al, 1996) is partially blocked in FGF9 by the side chain of F184 which makes the backbone nitrogen atoms less accessible for sulphate binding as observed for FGF2 and FGF1.

15 In the experimental FGF2/FGFR1 complex, this site contains a bound sulphate ion and is proposed to bind the terminal part of heparin (Plotnikov et al, 1999). Sulphate ions visible in the experimental FGF1/FGFR2 complex (Stauber et al, 2000; pdb-id 1DJS), however, seem to correspond well with the potential heparin binding sites on FGF9. In this complex three sulphate ions are bound to FGF1, K128, K118, and R122,

20 probably with contributions by K112 and R119. In FGF9 K183 corresponds to FGF1 K128 and, in addition, R69 is directed very close to the sulphate bound to FGF1 K128. FGF9 R173 and R177 correspond to FGF1 K118 and R122 and only a small adjustment due to F184 would be necessary for similar sulphate binding to the

WO 02/24722

PCT/IL01/00871

complex. These fine adjustments in the spatial organization of the heparin binding residues in FGF9 may well coordinate with the distinct structural variants of sulfated domains on heparin sulfates, required for binding and activation of different members of the FGF family as well as of other heparin binding growth factors (Ornitz, 2000).

5 Computer Representation

The FGF9 X-ray coordinate data, when used in conjunction with a computer programmed with software to translate those coordinates into the 3-dimensional structure of FGF9 may be used for a variety of purposes, especially for purposes relating to drug discovery. Such software for generating 3-dimensional 10 graphical representations are known and commercially available. The ready use of the coordinate data requires that it be stored in a computer-readable format. Thus, in accordance with the present invention, data capable of being displayed as the 3-dimensional structure of FGF9 and portions thereof and their structurally similar homologs is stored in a machine-readable storage medium, which is capable of 15 displaying a graphical 3-dimensional representation of the structure.

Therefore, another embodiment of this invention provides a machine-readable data storage medium, comprising a data storage material encoded with machine-readable data which, when used by a machine programmed with instructions for using said data, displays a graphical 3-dimensional representation of a molecule or 20 molecular complex comprising FGF9, or a homolog of said molecule or molecular complex, wherein said homolog comprises a binding pocket that has a root mean square deviation from the backbone atoms of said amino acids of not more than about 1.15 Å.

WO 02/24722

PCT/IL01/00871

Even more preferred is a machine-readable data storage medium that is capable of displaying a graphical 3-dimensional representation of a molecule or molecular complex that is defined by the structure coordinates of all of the amino acids in Figure 2 or a homolog of said molecule or molecular complex, wherein said 5 homolog has a root mean square deviation from the backbone atoms of all of the amino acids in Figure 2 of not more than about 1.15 Å.

According to an alternate embodiment, the machine-readable data storage medium comprises a data storage material encoded with a first set of machine-readable data which comprises the Fourier transform of the structure coordinates set 10 forth in Figure 2, and which, when using a machine programmed with instructions for using said data, can be combined with a second set of machine-readable data comprising the X-ray diffraction pattern of another molecule or molecular complex to determine at least a portion of the structure coordinates corresponding to the second set of machine-readable data.

15 For example, the Fourier transform of the structure coordinates set forth in Figure 2 may be used to determine at least a portion of the structure coordinates of FGF9.

According to an alternate embodiment, this invention provides a computer for producing a 3-dimensional representation of a molecule or molecular 20 complex, wherein said molecule or molecular complex comprises all of the FGF9 amino acids, wherein said computer comprises:

WO 02/24722

PCT/IL01/00871

(a) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein said machine-readable data comprises the structure coordinates of FGF9 or portions thereof;

(b) a working memory for storing instructions for processing said 5 machine-readable data;

(c) a central-processing unit coupled to said working memory and to said machine-readable data storage medium, for processing said machine-readable data into said 3-dimensional representation; and

(d) an output hardware coupled to said central processing unit, for 10 receiving said 3-dimensional representation.

Figure 4 demonstrates one version of these embodiments. System 10 includes a computer 11 comprising a central processing unit ("CPU") 20, a working memory 22 which may be, e.g., RAM (random-access memory) or "core" memory, mass storage memory 24 (such as one or more disk drives or CD-ROM drives), one or 15 more cathode-ray tube ("CRT") display terminals 26, one or more keyboards 28, one or more input lines 30, and one or more output lines 40, all of which are interconnected by a conventional bidirectional system bus 50.

Input hardware 36, coupled to computer 11 by input lines 30, may be implemented in a variety of ways. Machine-readable data of this invention may be 20 inputted via the use of a modem or modems 32 connected by a telephone line or dedicated data line 34. Alternatively or additionally, the input hardware 36 may comprise CD-ROM drives or disk drives 24. In conjunction with display terminal 26, keyboard 28 may also be used as an input device.

WO 02/24722

PCT/IL01/00871

Output hardware 46, coupled to computer 11 by output lines 40, may similarly be implemented by conventional devices. By way of example, output hardware 46 may include CRT display terminal 26 for displaying a graphical representation of a binding pocket of this invention using a program such as

5 QUANTA as described herein. Output hardware might also include a printer 42, so that hard copy output may be produced, or a disk drive 24, to store system output for later use.

In operation, CPU 20 coordinates the use of the various input and output devices 36, 46 coordinates data accesses from mass storage 24 and accesses to

10 and from working memory 22, and determines the sequence of data processing steps. A number of programs may be used to process the machine-readable data of this invention. Such programs are discussed in reference to the computational methods of drug discovery as described herein. Specific references to components of the hardware system 10 are included as appropriate throughout the following description

15 of the data storage medium.

Figure 5A shows a cross section of a magnetic data storage medium 100 which can be encoded with a machine-readable data that can be carried out by a system such as system 10 of Figure 4. Medium 100 can be a conventional floppy diskette or hard disk, having a suitable substrate 101, which may be conventional, and

20 a suitable coating 102, which may be conventional, on one or both sides, containing magnetic domains (not visible) whose polarity or orientation can be altered magnetically. Medium 100 may also have an opening (not shown) for receiving the spindle of a disk drive or other data storage device 24. The magnetic domains of

WO 02/24722

PCT/IL01/00871

coating 102 of medium 100 are polarized or oriented so as to encode in manner which may be conventional, machine-readable data such as that described herein, for execution by a system such as system 10 of Figure 4.

Figure 5B shows a cross-section of an optically-readable data storage 5 medium 110 which also can be encoded with such a machine-readable data, or set of instructions, which can be carried out by a system such as system 10 of Figure 4.

Medium 110 can be a conventional compact disk read only memory (CD-ROM) or a rewritable medium such as a magneto-optical disk that is optically readable and magneto-optically writable. Medium 100 preferably has a suitable substrate 111, 10 which may be conventional, and a suitable coating 112, which may be conventional, usually of one side of substrate 111.

In the case of CD-ROM, as is well known, coating 112 is reflective and is impressed with a plurality of pits 113 to encode the machine-readable data. The arrangement of pits is read by reflecting laser light off the surface of coating 112. A 15 protective coating 114, which preferably is substantially transparent, is provided on top of coating 112.

In the case of a magneto-optical disk, as is well known, coating 112 has no pits 113, but has a plurality of magnetic domains whose polarity or orientation can be changed magnetically when heated above a certain temperature, as by a laser (not 20 shown). The orientation of the domains can be read by measuring the polarization of laser light reflected from coating 112. The arrangement of the domains encodes the data as described above.

WO 02/24722

PCT/IL01/00871

As mentioned above, the FGF9 X-ray coordinate data is useful for screening and identifying drugs that inhibit FGF9. For example, the structure encoded by the data may be computationally evaluated for its ability to associate with putative substrates or ligands. Such compounds that associate with FGF9 may inhibit FGF9, 5 and are potential drug candidates. Additionally or alternatively, the structure encoded by the data may be displayed in a graphical 3-dimensional representation on a computer screen. This allows visual inspection of the structure, as well as visual inspection of the structure's association with the compounds.

Thus according to another embodiment, the method evaluates the 10 potential of a chemical entity to associate with a molecule or molecular complex defined by the structure coordinates of all of the FGF9 amino acids, as set forth in Figure 2, or a homolog of said molecule or molecular complex having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.1 Å.

This method comprises the steps of:

- 15 a) creating a computer model of the molecular or molecular complex using the structure coordinates as set forth in Figure 2, or a homolog of said molecule or molecular complex having a root mean square deviation from the backbone atoms of said amino acids not more than about 1.15 Å;
- b) employing computational means to perform a fitting operation 20 between the chemical entity and said computer model of the binding pocket; and
- c) analyzing the results of said fitting operation to quantify the association between the chemical entity and the binding pocket model.

WO 02/24722

PCT/IL01/00871

The term "chemical entity", as used herein, refers to chemical compounds or ligands, complexes of at least two chemical compounds, and fragments of such compounds or complexes.

More preferred is the use of the atomic coordinates of all the amino acids of FGF9 according to Figure 2 \pm a root mean square deviation from the backbone atoms of said amino acids of not more than 1.15 Å, to generate a 3-dimensional structure of FGF9.

For the first time, the present invention permits the use of molecular design techniques to identify, select or design potential inhibitors of FGF9, based on the structure of thereof. Such a predictive model is valuable in light of the high costs associated with the preparation and testing of the many diverse compounds that may possibly bind to the FGF9 protein.

According to this invention, a potential FGF9 inhibitor may now be evaluated for its ability to bind a FGF9-like binding pocket prior to its actual synthesis and testing. If a proposed compound is predicted to have insufficient interaction or association with the binding pocket, preparation and testing of the compound is obviated. However, if the computer modeling indicates a strong interaction, the compound may then be obtained and tested for its ability to bind.

A potential inhibitor of a FGF9-like binding pocket may be computationally evaluated by means of a series of steps in which chemical entities or fragments are screened and selected for their ability to associate with the FGF9-like binding pockets.

WO 02/24722

PCT/IL01/00871

One skilled in the art may use one of several methods to screen chemical entities or fragments for their ability to associate with a FGF9-like binding pocket. This process may begin by visual inspection of, for example, a FGF9-like binding pocket on the computer screen based on the FGF9 structure coordinates in 5 Figure 2 or other coordinates which define a similar shape generated from the machine-readable storage medium. Selected fragments or chemical entities may then be positioned in a variety of orientations, or docked, within that binding pocket as defined above. Docking may be accomplished using software such as Quanta and Sybyl, followed by energy minimization and molecular dynamics with standard 10 molecular mechanics force fields, such as CHARMM and AMBER.

Specialized computer programs may also assist in the process of selecting fragments or chemical entities. These include:

1. GRID (Goodford, 1985), which is available from Oxford University, Oxford, UK.
- 15 2. MCSS (Miranker et al, 1991), which is available from Molecular Simulations, San Diego, CA.
3. AUTODOCK (Goodsell et al, 1990), which is available from Scripps Research Institute, La Jolla, CA.
4. DOCK (Kuntz et al, 1982), which is available from University of 20 California, San Francisco, CA.

Once suitable chemical entities or fragments have been selected, they can be designed or assembled into a single compound or complex. Assembly may be preceded by visual inspection of the relationship of the fragments to each other on the

WO 02/24722

PCT/IL01/00871

3-dimensional image displayed on a computer screen in relation to the structure coordinates of FGF9. This would be followed by manual model building using software such as Quanta or Sybyl (Tripos Associates, St. Louis, MO). Useful programs to aid one of skill in the art in connecting the individual chemical entities or 5 fragments include:

1. CAVEAT (Bartlett et al, 1989; Lauri et al, 1994), which is available from the University of California, Berkeley, CA.
2. 3D Database systems, such as ISIS (MDL Information Systems, San Leandro, CA). This area is reviewed in Martin, 1992.
- 10 3. HOOK (Eisen et al, 1994), which is available from Molecular Simulations, San Diego, CA.

Instead of proceeding to build an inhibitor of a FGF9-like binding pocket in a step-wise fashion one fragment or chemical entity at a time as described above, inhibitory or other FGF9 binding compounds may be designed as a whole or 15 "de novo" using either an empty binding site or optionally including some portion(s) of a known inhibitor(s). There are many *de novo* ligand design methods including:

1. LUDI (Bohm, 1992), which is available from Molecular Simulations Incorporated, San Diego, CA.
2. LEGEND (Nishibata et al, 1991), which is available from Molecular 20 Simulations Incorporated, San Diego, CA.
3. LeapFrog (available from Tripos Associates, St. Louis, MO).
4. SPROUT (Gillet et al, 1993), which is available from the University of Leeds, UK.

WO 02/24722

PCT/IL01/00871

Other molecular modeling techniques may also be employed in accordance with this invention (see, e.g., Cohen et al, 1990; Navia et al, 1992; Balbes et al, 1994; Guida, 1994).

Once a compound has been designed or selected by the above methods, 5 the efficiency with which that entity may bind to a FGF9 binding pocket may be tested and optimized by computational evaluation. For example, an effective FGF9 binding pocket inhibitor must preferably demonstrate a relatively small difference in energy between its bound and free states (i.e., a small deformation energy of binding). Thus, the most efficient FGF9 binding pocket inhibitors should preferably be designed with 10 a deformation energy of binding of not greater than about 10 kcal/mole, more preferably, not greater than 7 kcal/mole. FGF9 binding pocket inhibitors may interact with the binding pocket in more than one of multiple conformations that are similar in overall binding energy. In those cases, the deformation energy of binding is taken to be the difference between the energy of the free entity and the average energy of the 15 conformations observed when the inhibitor binds to the protein.

An entity designed or selected as binding to a FGF9 binding pocket may be further computationally optimized so that in its bound state it would preferably lack repulsive electrostatic interaction with the target enzyme and with the surrounding water molecules. Such non-complementary electrostatic interactions include repulsive 20 charge-charge, dipole-dipole and charge-dipole interactions.

Specific computer software is available in the art to evaluate compound deformation energy and electrostatic interactions. Examples of programs designed for such uses include: Gaussian 99, revision C (M. J. Frisch, Gaussian, Inc., Pittsburgh,

WO 02/24722

PCT/IL01/00871

PA, ©1995); AMBER, version 4.1 (P. A. Kollman, University of California at San Francisco, ©1995); QUANTA/CHARMM (Molecular Simulations, Inc., San Diego, CA ©1995); Insight II/Discover (Molecular Simulations, Inc., San Diego, GA ©1995); DelPhi (Molecular Simulations, Inc., San Diego, CA ©1995); and AMSOL (Quantum 5 Chemistry Program Exchange, Indiana University). These programs may be implemented, for instance, using a Silicon Graphics workstation such as an Indigo² with "IMPACT" graphics. Other hardware systems and software packages will be known to those skilled in the art.

Another approach enabled by this invention, is the computational 10 screening of small molecule databases for chemical entities or compounds that can bind in whole, or in part, to a FGF9 binding pocket. In this screening, the quality of fit of such entities to the binding site may be judged either by shape complementarily or by estimated interaction energy (Meng et al, 1992).

According to another embodiment, the invention provides compounds 15 that associate with a FGF9-like binding pocket produced or identified by the method set forth above.

The structure coordinates set forth in Figure 2 can also be used to aid in obtaining structural information about another crystallized molecule or molecular 20 complex. This may be achieved by any of a number of well-known techniques, including molecular replacement.

In order that this invention be more fully understood, the following example is set forth. This example is for the purpose of illustration only and is not to be construed as limiting the scope of the invention in any way.

WO 02/24722

PCT/IL01/00871

EXAMPLE:**Materials and Methods**

The full-length coding region for human FGF9 (Miyamoto et al, 1993)

5 cDNA was isolated as a BamHI/blunt fragment from pET vector (Kuriyama et al, 1995) and subcloned into the vector pBacPAK9 digested with BglII and SmaI. Plasmids containing the cDNA species in proper orientation were isolated from bacteria, used for transfection into Sf9 cells with purified linearized baculovirus DNA. Screening for recombinant viruses, cloning and propagation or rec. viruses were 10 performed as described (Fiebich et al, 1993). For purification of FGF9 protein from the insect cell serum-free supernatant, it was adjusted to 0.6 M NaCl and purified over a 5 ml HiTrap heparin column (Pharmacia Amersham). FGF9 containing samples were pooled, diluted 1:3 with 20 mM Tris/Cl pH 7.4 and applied to a 5-ml TSK-heparin-affinity FPLC column (TosoHaas). Bound proteins were eluted with a 20ml 15 gradient of 0.4-1.5 M NaCl in buffer A (20 mM Tris/Cl, pH 7.4). Aliquots of 1 ml fraction containing FGF9 were used for SDS/PAGE and for silver staining of the gel.

The protein concentration was measured with a standard assay (BCA, Pierce). For amino-terminal sequencing of glycosylated rh FGF9, 20 mg protein from the biological active fractions (estimated with BALBc-3T3 cells, not shown) were 20 loaded onto a Applied Biosystems 473 A gas-phase protein sequenator. Twenty rounds of Edman degradation were carried out using standard protocols and chemicals supplied by Applied Biosystems (ca. 50% pos. 19 and 50% pos. 34 of the coding region).

WO 02/24722

PCT/IL01/00871

Crystals were grown with the sitting drop method to a typical size of 0.2×0.2×0.2 mm from solutions containing FGF9 at a concentration of 2.1 mg/ml and 2.0 M ammonium sulphate, buffered at pH 5.2 with 0.1 M MES/Tris buffer. The statistics of the native data set, collected at the MPG-GBF beamline BW6 of the 5 DESY synchrotron from a shock-cooled crystal to a resolution of 2.6 Å, are given in Table 1. Indexing and scaling the data set with Mosflm (CCP4, 1994) and Scala (CCP4, 1994) proved the space group to be tetragonal I4₁ with lattice constants a=151.9 Å, c=117.2 Å. The asymmetric unit contains four molecules showing clear two-fold symmetry in a pseudo-I4122 arrangement and in addition a pseudo-cubic 10 three-fold axis in the self-rotation function calculated with Gif (Tong et al, 1997). The structure was solved by molecular replacement. The successful run of EPMR (Kissinger et al, 1999) used the coordinates of FGF1 (Blaber et al, 1996; pdb-id 2afg), modified by replacement of all non-glycine residues by alanine, and identified clearly three of the four molecules in the asymmetric unit with a correlation factor of 0.296. 15 The fourth molecule was placed manually by complementing the third molecule to a dimer identical to the first two molecules. The structure was refined using CNS (Brunger et al, 1998), Refmac (CCP4, 1994), and O (Jones et al, 1991). Water molecules were added using Arpp/Refmac (CCP4, 1994) until the decrease of the free R-factor stopped. In the last stages of the refinement positional restraints for the non- 20 crystallographic symmetry were dropped, but, due to the limited resolution, only grouped temperature factors for main chain and side chain atoms were refined.

WO 02/24722

PCT/IL01/00871

TABLE 1
Data Set and Refine Statistics

| | |
|-----------------------|-----------------|
| Space Group | I4 ₁ |
| Unit Cell Parameters | |
| a (Å) | 151.9 |
| c (Å) | 117.2 |
| Resolution Range (Å) | 39.5-2.6 |
| Unique Reflections | 40985 |
| Completeness (%) | 99.9 (99.9) |
| I/sigma(I) | 9.5 (3.4) |
| R _{all} (%) | 22.0 |
| R _{free} (%) | 25.0 |
| Resolution | 40-2.6 |
| nr. residues | 624 |
| nr. sugars | 10 |
| nr. sulfates | 8 |
| nr. waters | 141 |
| Coord. Error * | 0.18 |
| Core Region (%)‡ | 90.0 |
| ncs-rms (Å)† | 0.58 |

values in parenthesis are for the highest resolution shell 2.74 Å-2.6 Å

5

$$R_{\text{merge}} = (\sum I_i(hkl) - \langle I(hkl) \rangle) / (\sum I_i(hkl)),$$

$$R_{\text{all}} = (\sum |F_0(hkl) - F_c(hkl)|) / (\sum F_0(hkl))$$

10

* calculated with SIGMAA (CCP4) and ‡ calculated with PROCHECK (CCP4)

† rms deviation of Cα protein atoms related by non-crystallographic symmetry calculated with LSQMAN (Kleywegt et al, 1997)

N-terminal sequencing and Maldi-mass-spectrometry indicated

15 heterogeneity of the crystallized protein with the major components starting at residues

WO 02/24722

PCT/IL01/00871

19, 34, 38, and 42 (Swissprot id FGF9_HUMAN). The glycoconjugate is, according to Maldi-mass-spectrometry, of the three-mannosyl insect type with 2 N-acetylglucosamines, 3 mannose and one fucose moiety, a minor component having two fucose molecules, as expected from the expression system. The structure shows 5 clearly in all four molecules at the N79 glycosylation site density for the two N-acetylglucosamines together with one fucose molecule, the rest of the carbohydrate is disordered. In the crystal all four molecules of the asymmetric unit show flexibility of the N-terminal and, to a lesser extent, the C-terminal residues.

The first residue visible in the electron density is in one molecule 10 Leu45 and in the others Thr52, C-terminal residues are visible up to 208, the native C-terminus, in one molecule, to 206 in two others, and to 204 in the last molecule. The average rmsd between all Ca-atoms common to the four molecules in the asymmetric unit is 0.6 and 0.3 for the residues 62 to 193. The final refinement statistics for the model consisting of 623 amino acid residues, 10 carbohydrate, 141 water and 8 15 sulphate molecules are given in Table 1. The coordinates are set forth in Figure 2.

The foregoing description of the specific embodiments will so fully reveal the general nature of the invention that others can, by applying current knowledge, readily modify and/or adapt for various applications such specific embodiments without undue experimentation and without departing from the generic 20 concept, and, therefore, such adaptations and modifications should and are intended to be comprehended within the meaning and range of equivalents of the disclosed embodiments. It is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation. The means, materials,

WO 02/24722

PCT/IL01/00871

and steps for carrying out various disclosed functions may take a variety of alternative forms without departing from the invention. Thus the expressions "means to..." and "means for...", or any method step language, as may be found in the specification above and/or in the claims below, followed by a functional statement, are intended to

5 define and cover whatever structural, physical, chemical or electrical element or structure, or whatever method step, which may now or in the future exist which carries out the recited function, whether or not precisely equivalent to the embodiment or embodiments disclosed in the specification above, i.e., other means or steps for carrying out the same functions can be used; and it is intended that such expressions

10 be given their broadest interpretation.

WO 02/24722

PCT/IL01/00871

REFERENCES

5 Ago et al, "Crystal structure of basic fibroblast growth factor at 1.6 Å resolution", J Biochem (Tokyo) 110:360-363 (1991)

10 10 Appelt, Perspectives in Drug Discovery and Design 1:23-48 (1993)

15 Balbes et al, "A Perspective of Modern Methods in Computer-Aided Drug Design", in Reviews in Computational Chemistry, Vol. 5, K. B. Lipkowitz and D. B. Boyd, Eds., VCH, New York, pp. 337-380 (1994)

20 Bartlett et al, "CAVEAT: A Program to Facilitate the Structure-Derived Design of Biologically Active Molecules", in Molecular Recognition in Chemical and Biological Problems, Special Pub., Royal Chem. Soc., 78:182-196 (1989)

25 15 Blaber et al, "X-ray crystal structure of human acidic fibroblast growth factor", Biochemistry 35:2086-2094 (1996)

30 20 Bohm, "The Computer Program LUDI: A New Method for the De Novo Design of Enzyme Inhibitors", J Comp Aid Molec Design 6:61-78 (1992)

35 Brunger et al, "Crystallography and NMR system (CNS): A new software system for macromolecular structure determination", Acta Cryst D54:905-921 (1998)

40 25 Bugg et al (1993), "Drugs by Design", Scientific American, 269(6):92-98

45 CCP4 Collaborative Computational Project, No. 4, "The CCP4 Suite: Programs for Protein Crystallography" Acta Cryst D50:760-763 (1994)

50 Cohen et al, "Molecular Modeling Software and Methods for Medicinal Chemistry" J Med Chem 33:883-894 (1990)

55 Coughlin et al, "Acidic and basic fibroblast growth factors stimulate tyrosine kinase activity in vivo" J Biol Chem 263:988-93 (1988)

60 35 Cwirla et al, "Peptides on phage: a vast library of peptides for identifying ligands", Proc. Natl. Acad. Sci., 87(16):6378-6382 (1990),

65 Davis et al, "Oligomeric self-association of basic fibroblast growth factor in the absence of heparin-like glycosaminoglycans", Biochem J 341:613-20 (1999)

70 Devlin et al, "Random peptide libraries: a source of specific protein binding molecules", Science, 249(4967):404-406 (1990)

75 45 DiGabriele et al, "Structure of a heparin-linked biologically active dimer of fibroblast growth factor", Nature 393:812-817 (1998)

WO 02/24722

PCT/IL01/00871

Dunbrack et al, "Meeting review: the Second meeting on the Critical Assessment of Techniques for Protein Structure Prediction (CASP2), Asilomar, California, December 13-16, 1996", Fold Des 1997;2(2):R27-42 (1997)

5 Eisen et al, "HOOK: A Program for Finding Novel Molecular Architectures that Satisfy the Chemical and Steric Requirements of a Macromolecule Binding Site", Proteins: Struct, Funct, Genet, 19, pp. 199-221 (1994)

10 Erickson, Perspectives in Drug Discovery and Design, 1:109-128 (1993)

Faham et al, "Heparin structure and interactions with basic fibroblast growth factor", Science 271:1116-1120 (1996)

15 Fiebich et al, "Synthesis and assembly of functionally active human vascular endothelial growth factor homodimers in insect cello", Eur J Biochem 211:19-26 (1993)

20 Folkman et al, "Vascular physiology. A family of angiogenic peptides", Nature 329:671-672 (1987)

Garofalo et al, "Skeletal Dysplasia and Defective Chondrocyte Differentiation by Targeted Overexpression of Fibroblast Growth Factor 9 in Transgenic Mice", J Bone Miner Res 14:1909-1915 (1999)

25 Gillet et al, "SPROUT: A Program for Structure Generation", J Comput Aided Mol Design 7:127-153 (1993)

Goodford, "A Computational Procedure for Determining Energetically Favorable Binding Sites on Biologically Important Macromolecules", J Med Chem 28:849-857 (1985)

30 Goodsell et al, "Automated Docking of Substrates to Proteins by Simulated Annealing", Proteins: Struct, Funct, and Genet 8:195-202 (1990)

35 Guida, "Software For Structure-Based Drug Design", Curr Opin Struct Biology 4:777-781 (1994)

40 Guimond et al, "Activating and inhibitory heparin sequences for FGF-2 (basic FGF). Distinct requirements for FGF-1, FGF-2, and FGF-4", J Biol Chem 268:23906-23914 (1993)

45 Hecht et al, "Identification of fibroblast growth factor 9 (FGF9) as a high affinity, heparin dependent ligand for FGF receptors 3 and 2 but not for FGF receptors 1 and 4", Growth Factors 12:223-233 (1995)

45

WO 02/24722

PCT/IL01/00871

Hecht et al., "Structure of fibroblast growth factor 9 shows a symmetric dimer with unique receptor- and heparin-binding interfaces" Acta Cryst. D57: (2001)

5 Herr et al, "Heparin-induced self-association of fibroblast growth factor-2. Evidence for two oligomerization processes", J Biol Chem 272:16382-16389 (1997)

Jones et al, "Improved Methods for Building Protein Models in Electron Density Maps and the Location of Errors in these Models", Acta Cryst A47:110-119 (1991)

10 Kan et al, "An essential heparin-binding domain in the fibroblast growth factor receptor kinase", Science 259:1918-21 (1993)

Kissinger et al, "Rapid automated molecular replacement by evolutionary search", Acta Cryst D55:484-491 (1999)

15 Kleywegt et al, "Detecting folding motifs and similarities in protein structures", Methods in Enzymology 277:525-545 (1997)

20 Kuntz et al, "A geometric approach to macromolecule-ligand interactions", J Mol Biol 161(2):269-288 (1982)

Kuriyama et al, Fermentation and Bioengineering 80:327-333 (1995)

25 Lam et al (1994), Science, 263:380-384;

Lauri et al, "CAVEAT: a Program to Facilitate the Design of Organic Molecules", J Comput Aided Mol Des 8:51-66 (1994)

30 Lozano et al, "Solution structure of acidic fibroblast growth factor bound to 1,3,6-naphthalenetrisulfonate: a minimal model for the anti-tumoral action of suramins and suradistas", J Mol Biol 281:899-915 (1998)

Martin, "3D Database Searching in Drug Design", J Med Chem 35:2145-2154 (1992)

35 Meng et al, J Comp Chem 13:505-524 (1992)

Miranker et al, "Functionality Maps of Binding Sites: A Multiple Copy Simultaneous Search Method", Proteins: Struct, Funct and Genet 11:29-34 (1991)

40 Miyamoto et al, "Molecular cloning of a novel cytokine cDNA encoding the ninth member of the fibroblast growth factor family, which has a unique secretion property", Mol Cell Biol 13:4251-4259 (1993)

45 Moy et al, "High-resolution solution structure of basic fibroblast growth factor determined by multidimensional heteronuclear magnetic resonance spectroscopy", Biochemistry 35:13552-13561 (1996)

WO 02/24722

PCT/IL01/00871

Moy et al, "Properly oriented heparin-decasaccharide-induced dimers are the biologically active form of basic fibroblast growth factor", Biochemistry 36:4782-4791 (1997)

5 Nauro et al, "Novel secretory heparin-binding factors from human glioma cells (glia-activating factors) involved in glial cell growth. Purification and biological properties", J Biol Chem 268:2857-2864 (1993)

10 Navaza, Acta Crystal, 157-163 (1994)

15 Navia et al, "The Use of Structural Information in Drug Design", Current Opinions in Structural Biology 2:202-210 (1992)

15 Nicholls et al, "Protein folding and association: insights from the interfacial and thermodynamic properties of hydrocarbons", Proteins: Struct, Funct and Genet 11(4):281 (1991)

20 Nishibata et al, Tetrahedron 47:8985 (1991)

20 Ornitz, "FGFs, heparin sulfate and FGFRs: complex interactions essential for development", BioEssays 22:108-112 (2000)

25 Pantoliano et al, "Multivalent ligand-receptor binding interactions in the fibroblast growth factor system produce a cooperative growth factor and heparin mechanism for receptor dimerization", Biochemistry 33:10229-10248 (1994)

30 Plotnikov et al, "Structural basis for FGF receptor dimerization and activation", Cell 98:641-650 (1999)

30 Plotnikov et al, "Crystal structures of two FGF-FGFR complexes reveal the determinants of ligand-receptor specificity", Cell 101:413-424 (2000)

35 Rapraeger et al, "Requirement of heparin sulfate for bFGF-mediated fibroblast growth and myoblast differentiation", Science 252:1705-1708 (1991)

35 Revest et al, "Fibroblast growth factor 9 secretion is mediated by a non-cleaved amino-terminal signal sequence", J Biol Chem 275:8083-8090 (1999)

40 Rifkin et al, "Recent developments in the cell biology of basic fibroblast growth factor", J Cell Biol 109:1-6 (1989)

45 Ruoslahti et all, "Proteoglycans as modulators of growth factor activities", Cell 64:867-9 (1991)

45 Schlessinger et al, "Growth factor signaling by receptor tyrosine kinases", Neuron 9:383-391 (1992)

WO 02/24722

PCT/IL01/00871

Scott et al, "Searching for peptide ligands with an epitope library", Science 249:386-390 (1990)

5 Spivak-Kroizman et al, "Heparin-induced oligomerization of FGF molecules is responsible for FGF receptor dimerization, activation, and cell proliferation", Cell 79:1015-1024 (1994)

10 Springer et al, "Identification and concerted function of two receptor binding surfaces on basic fibroblast growth factor required for mitogenesis", J Biol Chem 269:26879-26884 (1994)

15 Stauber et al, "Structural interactions of fibroblast growth factor receptor with its ligands", Proc Natl Acad Sci 97:49-54 (2000)

20 Tong et al, "Rotation function calculations with GLRF program", Methods in Enzymology 246:594-611 (1997)

25 Venkataraman et al, "Molecular characteristics of fibroblast growth factor-fibroblast growth factor receptor-heparin-like glycosaminoglycan complex", Proc Natl Acad Sci 96:3658-3663 (1999)

30 West et al, TIPS, 16:67-74 (1995)

35 Wlodawer et al, "Structure-based inhibitors of HIV-1 protease", Ann Rev Biochem, 62:543-585 (1993)

40 Yayon et al, "Cell surface, heparin-like molecules are required for binding of basic fibroblast growth factor to its high affinity receptor", Cell 64:841-848 (1991)

45 Ye et al, "The Crystal Structures of Rat Fibroblast Growth Factor 7 and Rat/Human Fibroblast Growth Factor 1 Chimera", To be Published (Pdb-id 1QQK) (1999)

Zhang et al, "Three-dimensional structure of human basic fibroblast growth factor, a structural homolog of interleukin 1 beta", Proc Natl Acad Sci 88:3446-3450 (1991)

Zhu et al, "Three-dimensional structures of acidic and basic fibroblast growth factors", Science 251:90-93 (1991)

Zhu et al, "Analysis of high-affinity binding determinants in the receptor binding epitope of basic fibroblast growth factor", Protein Eng 10:417-421 (1997)

Zhu et al, "Identification of two new hydrophobic residues on basic fibroblast growth factor important for fibroblast growth factor receptor binding", Protein Eng 11:937-940 (1998)

45

WO 02/24722

PCT/IL01/00871

WHAT IS CLAIMED IS:

1. An FGF9 crystal in a tetragonal space group I4₁ with lattice constants a=151.9 Å and c=117.2 Å.
2. A crystal in accordance with claim 1 refined to an R-value of about 22% at 2.6 Å resolution.
3. A composition consisting essentially of FGF9 in crystalline form.
4. A method of using the crystal of claim 1 in a drug screening assay, comprising:
 - (a) selecting a potential ligand by performing rational drug design with the three-dimensional structure determined for the crystal, wherein said selecting is performed in conjunction with computer modeling;
 - (b) contacting the potential ligand with FGF9; and
 - (c) detecting the binding of the potential ligand for FGF9, wherein a potential drug is selected on the basis of its having the capability of binding to FGF9.
5. A method of using the crystal of claim 1 in a drug screening assay, comprising:
 - (a) selecting a potential ligand by performing rational drug design with the three-dimensional structure determined for the crystal, wherein said selecting is performed in conjunction with computer modeling;
 - (b) contacting the potential ligand with FGFR3; and
 - (c) detecting the binding of the potential ligand to FGFR3, wherein a potential drug is selected on the basis of its having the capability of binding to FGFR3 with a greater affinity than that of FGF9 for FGFR3.

WO 02/24722

PCT/IL01/00871

6. A method of using the crystal of claim 1 in a drug screening assay comprising:

(a) selecting a potential antagonist by performing rational drug design with the three-dimensional structure determined for the crystal, wherein said selecting is performed in conjunction with computer modeling;

5 (b) adding the potential antagonist to a mixture of FGF9 and FGFR3; and

(c) detecting the ability of the potential antagonist to prevent binding of FGF9 to FGFR3, wherein a potential antagonist that inhibits the binding of FGF9 to FGFR3 is selected as a potential drug.

7. A method in accordance with any one of claims 4-6, wherein said potential

10 ligand or potential antagonist is a mutant or fragment of FGF9.

8. A crystal in accordance with claim 1, wherein the four molecules of the asymmetric unit are organized in two dimers related by non-crystallographic symmetry.

9. A model of FGF9, wherein said model represents a three-dimensional structure that substantially conforms to the atomic coordinates of Figure 2.

15 10. A computer-assisted method of structure based drug design of bioactive compounds using the model of claim 9, comprising:

providing said model in the form of a computer image generated when the coordinates listed in Figure 2 are analyzed on a computer using a graphical display software program to create an electronic file of said image and visualizing said electronic files on a computer capable of representing said electronic file as a three-dimensional image;

20 designing a chemical compound using said computer image; and

WO 02/24722

PCT/IL01/00871

chemically synthesizing said chemical compound.

11. A method in accordance with claim 10, wherein said step of designing comprises computational screening of one or more databases of chemical compounds in which the three-dimensional structure of said compounds are known.
- 5 12. A three-dimensional computer image of the three-dimensional structure of FGF9.
13. The image of claim 12, wherein said structure substantially conforms with the three-dimensional coordinates listed in Figure 2.
14. A computer-readable data storage medium comprising a data storage material 10 encoded with computer-readable data, wherein said computer-readable data comprises a set of three-dimensional coordinates of FGF9 having a three-dimensional structure that substantially conforms to the atomic coordinates of Figure 2, wherein, using a graphical display software program, said data creates an electronic file that can be visualized on a computer capable of representing said electronic file as a three-dimensional image.
- 15 15. A computer for producing a three-dimensional representation of FGF9, wherein said computer comprises:
 - a computer-readable data storage medium in accordance with claim 14;
 - a working memory for storing instructions for processing said computer-readable data;
 - a central-processing unit coupled to said working memory and to said computer-readable 20 data storage medium, for processing said computer-readable data into said three-dimensional representation; and

WO 02/24722

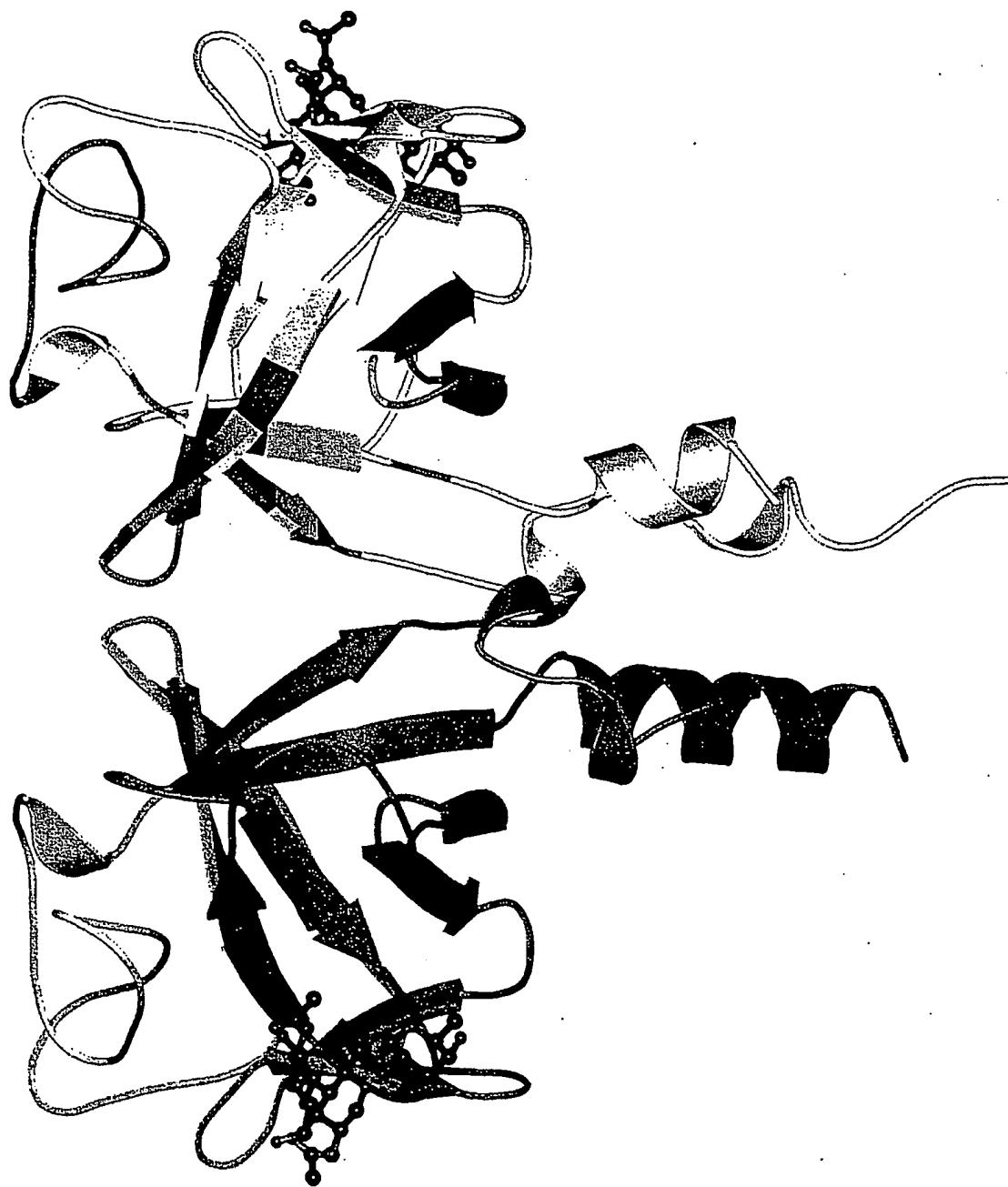
PCT/IL01/00871

an output hardware coupled to said central processing unit, for receiving said three-dimensional representation.

WO 02/24722

PCT/IL01/00871

FIGURE 1



WO 02/24722

PCT/IL01/00871

FIGURE 2

REMARK coordinates from minimization and B-factor refinement
 REMARK refinement resolution: 500.0 - 2.6 Å
 REMARK starting $r=0.2186$ free_ $r=0.2494$
 REMARK final $r=0.2188$ free_ $r=0.2500$
 REMARK rmsd bonds= 0.006201 rmsd angles= 1.30156
 REMARK B rmsd for bonded mainchain atoms= \$brms_bond_1 target= &bsig_main
 REMARK B rmsd for angle mainchain atoms= \$brms_angl_1 target= &asig_main
 REMARK target= mlf final wa= 1.56562 final rweight=\$b_rweight
 REMARK md-method= cartesian annealing schedule= slowcool
 REMARK starting temperature= 2000 total md steps= 20 * 50
 REMARK cycles= 2 coordinate steps= 50 B-factor steps= 30
 REMARK sg= 14(1) a= 151.95 b= 151.95 c= 117.23 alpha= 90 beta= 90 gamma= 90
 REMARK topology file 1 : CNS_TOPPAR:protein.top
 REMARK topology file 2 : CNS_TOPPAR:dna-ma.top
 REMARK topology file 3 : CNS_TOPPAR:water.top
 REMARK topology file 4 : CNS_TOPPAR:ion.top
 REMARK topology file 5 : CNS_TOPPAR:carbohydrate.top
 REMARK parameter file 1 : CNS_TOPPAR:protein_rep.param
 REMARK parameter file 2 : CNS_TOPPAR:dna-ma_rep.param
 REMARK parameter file 3 : CNS_TOPPAR:water_rep.param
 REMARK parameter file 4 : CNS_TOPPAR:ion.param
 REMARK parameter file 5 : CNS_TOPPAR:carbohydrate.param
 REMARK molecular structure file: fgf9_60.mtf
 REMARK input coordinates: fgf_60.xpdb
 REMARK reflection file= fgf9h_t-u.refl
 REMARK ncs= none
 REMARK B-correction resolution: 6.0 - 2.6
 REMARK initial B-factor correction applied to fobs :
 REMARK B11= 3.191 B22= 3.191 B33= -6.383
 REMARK B12= 0.000 B13= 0.000 B23= 0.000
 REMARK B-factor correction applied to coordinate array B: 0.876
 REMARK bulk solvent: density level= 0.360313 e/Å^3, B-factor= 49.9235 Å^2
 REMARK reflections with $|F_{obs}|/\sigma_F < 0.0$ rejected
 REMARK reflections with $|F_{obs}| > 10000 * \text{rms}(F_{obs})$ rejected
 REMARK theoretical total number of refl. in resol. range: 40991 (100.0 %)
 REMARK number of unobserved reflections (no entry or $|F|=0$): 16 (0.0 %)
 REMARK number of reflections rejected: 0 (0.0 %)
 REMARK total number of reflections used: 40975 (100.0 %)
 REMARK number of reflections in working set: 38917 (94.9 %)
 REMARK number of reflections in test set: 2058 (5.0 %)
 CRYST1 151.950 151.950 117.230 90.00 90.00 90.00 141
 REMARK FILENAME="/sf/bhf/fgf/cns/fgf9_r60_1.pdb"
 REMARK DATE:17-Jul-00 12:21:18 created by user: bhf
 REMARK VERSION:1.0

| | | | | | | | | | | | |
|------|---|-----|-----|---|----|--------|--------|--------|------|--------|---|
| ATOM | 1 | CB | THR | A | 52 | 62.332 | 98.192 | -4.398 | 1.00 | 98.81 | A |
| ATOM | 2 | OG1 | THR | A | 52 | 63.583 | 98.020 | -5.081 | 1.00 | 98.81 | A |
| ATOM | 3 | CG2 | THR | A | 52 | 62.575 | 98.803 | -3.021 | 1.00 | 98.81 | A |
| ATOM | 4 | C | THR | A | 52 | 62.621 | 95.802 | -3.722 | 1.00 | 100.00 | A |
| ATOM | 5 | O | THR | A | 52 | 63.042 | 95.885 | -2.565 | 1.00 | 100.00 | A |
| ATOM | 6 | N | THR | A | 52 | 60.404 | 96.933 | -3.410 | 1.00 | 100.00 | A |
| ATOM | 7 | CA | THR | A | 52 | 61.620 | 96.823 | -4.268 | 1.00 | 100.00 | A |
| ATOM | 8 | N | ASP | A | 53 | 62.993 | 94.840 | -4.563 | 1.00 | 92.79 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|----|-----|-----|---|----|--------|---------|--------|------|--------|---|
| ATOM | 9 | CA | ASP | A | 53 | 63.949 | 93.808 | -4.175 | 1.00 | 92.79 | A |
| ATOM | 10 | CB | ASP | A | 53 | 63.826 | 92.579 | -5.082 | 1.00 | 100.00 | A |
| ATOM | 11 | CG | ASP | A | 53 | 62.415 | 92.033 | -5.146 | 1.00 | 100.00 | A |
| ATOM | 12 | OD1 | ASP | A | 53 | 61.803 | 91.824 | -4.076 | 1.00 | 100.00 | A |
| ATOM | 13 | OD2 | ASP | A | 53 | 61.922 | 91.804 | -6.272 | 1.00 | 100.00 | A |
| ATOM | 14 | C | ASP | A | 53 | 65.371 | 94.350 | -4.275 | 1.00 | 92.79 | A |
| ATOM | 15 | O | ASP | A | 53 | 66.253 | 93.940 | -3.524 | 1.00 | 92.79 | A |
| ATOM | 16 | N | LEU | A | 54 | 65.583 | 95.272 | -5.212 | 1.00 | 90.69 | A |
| ATOM | 17 | CA | LEU | A | 54 | 66.897 | 95.873 | -5.431 | 1.00 | 90.69 | A |
| ATOM | 18 | CB | LEU | A | 54 | 66.838 | 96.848 | -6.613 | 1.00 | 88.23 | A |
| ATOM | 19 | CG | LEU | A | 54 | 68.176 | 97.443 | -7.064 | 1.00 | 88.23 | A |
| ATOM | 20 | CD1 | LEU | A | 54 | 68.957 | 96.396 | -7.846 | 1.00 | 88.23 | A |
| ATOM | 21 | CD2 | LEU | A | 54 | 67.941 | 98.675 | -7.921 | 1.00 | 88.23 | A |
| ATOM | 22 | C | LEU | A | 54 | 67.411 | 96.615 | -4.194 | 1.00 | 90.69 | A |
| ATOM | 23 | O | LEU | A | 54 | 68.528 | 96.371 | -3.730 | 1.00 | 90.69 | A |
| ATOM | 24 | N | ASP | A | 55 | 66.589 | 97.521 | -3.671 | 1.00 | 80.40 | A |
| ATOM | 25 | CA | ASP | A | 55 | 66.947 | 98.317 | -2.500 | 1.00 | 80.40 | A |
| ATOM | 26 | CB | ASP | A | 55 | 65.906 | 99.416 | -2.276 | 1.00 | 100.00 | A |
| ATOM | 27 | CG | ASP | A | 55 | 65.890 | 100.436 | -3.395 | 1.00 | 100.00 | A |
| ATOM | 28 | OD1 | ASP | A | 55 | 65.600 | 100.054 | -4.549 | 1.00 | 100.00 | A |
| ATOM | 29 | OD2 | ASP | A | 55 | 66.173 | 101.620 | -3.122 | 1.00 | 100.00 | A |
| ATOM | 30 | C | ASP | A | 55 | 67.095 | 97.481 | -1.235 | 1.00 | 80.40 | A |
| ATOM | 31 | O | ASP | A | 55 | 67.983 | 97.730 | -0.412 | 1.00 | 80.40 | A |
| ATOM | 32 | N | HIS | A | 56 | 66.220 | 96.495 | -1.074 | 1.00 | 63.87 | A |
| ATOM | 33 | CA | HIS | A | 56 | 66.289 | 95.630 | 0.092 | 1.00 | 63.87 | A |
| ATOM | 34 | CB | HIS | A | 56 | 65.074 | 94.707 | 0.141 | 1.00 | 66.67 | A |
| ATOM | 35 | CG | HIS | A | 56 | 64.965 | 93.927 | 1.412 | 1.00 | 66.67 | A |
| ATOM | 36 | CD2 | HIS | A | 56 | 64.288 | 94.181 | 2.557 | 1.00 | 66.67 | A |
| ATOM | 37 | ND1 | HIS | A | 56 | 65.634 | 92.740 | 1.618 | 1.00 | 66.67 | A |
| ATOM | 38 | CE1 | HIS | A | 56 | 65.374 | 92.296 | 2.835 | 1.00 | 66.67 | A |
| ATOM | 39 | NE2 | HIS | A | 56 | 64.560 | 93.152 | 3.426 | 1.00 | 66.67 | A |
| ATOM | 40 | C | HIS | A | 56 | 67.577 | 94.811 | 0.018 | 1.00 | 63.87 | A |
| ATOM | 41 | O | HIS | A | 56 | 68.181 | 94.489 | 1.039 | 1.00 | 63.87 | A |
| ATOM | 42 | N | LEU | A | 57 | 67.993 | 94.491 | -1.205 | 1.00 | 53.08 | A |
| ATOM | 43 | CA | LEU | A | 57 | 69.211 | 93.728 | -1.431 | 1.00 | 53.08 | A |
| ATOM | 44 | CB | LEU | A | 57 | 69.279 | 93.245 | -2.881 | 1.00 | 67.42 | A |
| ATOM | 45 | CG | LEU | A | 57 | 70.536 | 92.450 | -3.247 | 1.00 | 67.42 | A |
| ATOM | 46 | CD1 | LEU | A | 57 | 70.614 | 91.187 | -2.393 | 1.00 | 67.42 | A |
| ATOM | 47 | CD2 | LEU | A | 57 | 70.507 | 92.099 | -4.722 | 1.00 | 67.42 | A |
| ATOM | 48 | C | LEU | A | 57 | 70.414 | 94.611 | -1.128 | 1.00 | 53.08 | A |
| ATOM | 49 | O | LEU | A | 57 | 71.384 | 94.170 | -0.504 | 1.00 | 53.08 | A |
| ATOM | 50 | N | LYS | A | 58 | 70.347 | 95.859 | -1.582 | 1.00 | 55.79 | A |
| ATOM | 51 | CA | LYS | A | 58 | 71.426 | 96.804 | -1.339 | 1.00 | 55.79 | A |
| ATOM | 52 | CB | LYS | A | 58 | 71.071 | 98.179 | -1.911 | 1.00 | 90.10 | A |
| ATOM | 53 | CG | LYS | A | 58 | 71.138 | 98.270 | -3.426 | 1.00 | 90.10 | A |
| ATOM | 54 | CD | LYS | A | 58 | 70.691 | 99.645 | -3.900 | 1.00 | 90.10 | A |
| ATOM | 55 | CE | LYS | A | 58 | 71.106 | 99.915 | -5.342 | 1.00 | 90.10 | A |
| ATOM | 56 | NZ | LYS | A | 58 | 70.597 | 98.890 | -6.292 | 1.00 | 90.10 | A |
| ATOM | 57 | C | LYS | A | 58 | 71.620 | 96.903 | 0.170 | 1.00 | 55.79 | A |
| ATOM | 58 | O | LYS | A | 58 | 72.739 | 97.066 | 0.659 | 1.00 | 55.79 | A |
| ATOM | 59 | N | GLY | A | 59 | 70.514 | 96.789 | 0.900 | 1.00 | 49.26 | A |
| ATOM | 60 | CA | GLY | A | 59 | 70.570 | 96.861 | 2.343 | 1.00 | 49.26 | A |
| ATOM | 61 | C | GLY | A | 59 | 71.181 | 95.611 | 2.937 | 1.00 | 49.26 | A |
| ATOM | 62 | O | GLY | A | 59 | 71.838 | 95.680 | 3.969 | 1.00 | 49.26 | A |
| ATOM | 63 | N | ILE | A | 60 | 70.962 | 94.462 | 2.304 | 1.00 | 41.77 | A |
| ATOM | 64 | CA | ILE | A | 60 | 71.521 | 93.218 | 2.812 | 1.00 | 41.77 | A |
| ATOM | 65 | CB | ILE | A | 60 | 70.879 | 91.986 | 2.124 | 1.00 | 45.06 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|----|--------|---------|--------|------|-------|---|
| ATOM | 66 | CG2 | ILE | A | 60 | 71.789 | 90.765 | 2.259 | 1.00 | 45.06 | A |
| ATOM | 67 | CG1 | ILE | A | 60 | 69.503 | 91.720 | 2.754 | 1.00 | 45.06 | A |
| ATOM | 68 | CD1 | ILE | A | 60 | 68.737 | 90.577 | 2.134 | 1.00 | 45.06 | A |
| ATOM | 69 | C | ILE | A | 60 | 73.022 | 93.240 | 2.597 | 1.00 | 41.77 | A |
| ATOM | 70 | O | ILE | A | 60 | 73.790 | 92.697 | 3.401 | 1.00 | 41.77 | A |
| ATOM | 71 | N | LEU | A | 61 | 73.437 | 93.891 | 1.515 | 1.00 | 41.07 | A |
| ATOM | 72 | CA | LEU | A | 61 | 74.854 | 94.022 | 1.215 | 1.00 | 41.07 | A |
| ATOM | 73 | CB | LEU | A | 61 | 75.054 | 94.693 | -0.141 | 1.00 | 57.91 | A |
| ATOM | 74 | CG | LEU | A | 61 | 74.439 | 93.933 | -1.313 | 1.00 | 57.91 | A |
| ATOM | 75 | CD1 | LEU | A | 61 | 74.527 | 94.770 | -2.571 | 1.00 | 57.91 | A |
| ATOM | 76 | CD2 | LEU | A | 61 | 75.151 | 92.605 | -1.482 | 1.00 | 57.91 | A |
| ATOM | 77 | C | LEU | A | 61 | 75.497 | 94.870 | 2.309 | 1.00 | 41.07 | A |
| ATOM | 78 | O | LEU | A | 61 | 76.710 | 94.810 | 2.516 | 1.00 | 41.07 | A |
| ATOM | 79 | N | ARG | A | 62 | 74.676 | 95.645 | 3.015 | 1.00 | 36.78 | A |
| ATOM | 80 | CA | ARG | A | 62 | 75.170 | 96.502 | 4.089 | 1.00 | 36.78 | A |
| ATOM | 81 | CB | ARG | A | 62 | 74.511 | 97.891 | 4.021 | 1.00 | 66.13 | A |
| ATOM | 82 | CG | ARG | A | 62 | 74.561 | 98.600 | 2.662 | 1.00 | 66.13 | A |
| ATOM | 83 | CD | ARG | A | 62 | 75.980 | 98.774 | 2.147 | 1.00 | 66.13 | A |
| ATOM | 84 | NE | ARG | A | 62 | 76.094 | 99.682 | 0.996 | 1.00 | 66.13 | A |
| ATOM | 85 | CZ | ARG | A | 62 | 75.475 | 99.532 | -0.177 | 1.00 | 66.13 | A |
| ATOM | 86 | NH1 | ARG | A | 62 | 74.663 | 98.505 | -0.398 | 1.00 | 66.13 | A |
| ATOM | 87 | NH2 | ARG | A | 62 | 75.693 | 100.407 | -1.146 | 1.00 | 66.13 | A |
| ATOM | 88 | C | ARG | A | 62 | 74.951 | 95.912 | 5.490 | 1.00 | 36.78 | A |
| ATOM | 89 | O | ARG | A | 62 | 75.022 | 96.637 | 6.479 | 1.00 | 36.78 | A |
| ATOM | 90 | N | ARG | A | 63 | 74.680 | 94.610 | 5.582 | 1.00 | 40.59 | A |
| ATOM | 91 | CA | ARG | A | 63 | 74.467 | 93.975 | 6.889 | 1.00 | 40.59 | A |
| ATOM | 92 | CB | ARG | A | 63 | 73.892 | 92.558 | 6.732 | 1.00 | 57.49 | A |
| ATOM | 93 | CG | ARG | A | 63 | 72.488 | 92.476 | 6.154 | 1.00 | 57.49 | A |
| ATOM | 94 | CD | ARG | A | 63 | 71.481 | 93.211 | 7.009 | 1.00 | 57.49 | A |
| ATOM | 95 | NE | ARG | A | 63 | 70.148 | 93.208 | 6.412 | 1.00 | 57.49 | A |
| ATOM | 96 | CZ | ARG | A | 63 | 69.265 | 92.222 | 6.545 | 1.00 | 57.49 | A |
| ATOM | 97 | NH1 | ARG | A | 63 | 69.563 | 91.142 | 7.260 | 1.00 | 57.49 | A |
| ATOM | 98 | NH2 | ARG | A | 63 | 68.075 | 92.322 | 5.968 | 1.00 | 57.49 | A |
| ATOM | 99 | C | ARG | A | 63 | 75.777 | 93.891 | 7.680 | 1.00 | 40.59 | A |
| ATOM | 100 | O | ARG | A | 63 | 76.828 | 93.549 | 7.128 | 1.00 | 40.59 | A |
| ATOM | 101 | N | ARG | A | 64 | 75.706 | 94.184 | 8.976 | 1.00 | 38.46 | A |
| ATOM | 102 | CA | ARG | A | 64 | 76.886 | 94.149 | 9.825 | 1.00 | 38.46 | A |
| ATOM | 103 | CB | ARG | A | 64 | 77.596 | 95.506 | 9.787 | 1.00 | 37.19 | A |
| ATOM | 104 | CG | ARG | A | 64 | 77.879 | 96.081 | 8.411 | 1.00 | 37.19 | A |
| ATOM | 105 | CD | ARG | A | 64 | 79.195 | 95.593 | 7.846 | 1.00 | 37.19 | A |
| ATOM | 106 | NE | ARG | A | 64 | 79.497 | 96.230 | 6.567 | 1.00 | 37.19 | A |
| ATOM | 107 | CZ | ARG | A | 64 | 78.937 | 95.896 | 5.405 | 1.00 | 37.19 | A |
| ATOM | 108 | NH1 | ARG | A | 64 | 78.039 | 94.918 | 5.351 | 1.00 | 37.19 | A |
| ATOM | 109 | NH2 | ARG | A | 64 | 79.272 | 96.546 | 4.291 | 1.00 | 37.19 | A |
| ATOM | 110 | C | ARG | A | 64 | 76.551 | 93.851 | 11.284 | 1.00 | 38.46 | A |
| ATOM | 111 | O | ARG | A | 64 | 75.391 | 93.802 | 11.689 | 1.00 | 38.46 | A |
| ATOM | 112 | N | GLN | A | 65 | 77.603 | 93.645 | 12.063 | 1.00 | 37.51 | A |
| ATOM | 113 | CA | GLN | A | 65 | 77.509 | 93.439 | 13.497 | 1.00 | 37.51 | A |
| ATOM | 114 | CB | GLN | A | 65 | 77.958 | 92.040 | 13.900 | 1.00 | 38.80 | A |
| ATOM | 115 | CG | GLN | A | 65 | 77.133 | 90.900 | 13.350 | 1.00 | 38.80 | A |
| ATOM | 116 | CD | GLN | A | 65 | 77.536 | 89.564 | 13.965 | 1.00 | 38.80 | A |
| ATOM | 117 | OE1 | GLN | A | 65 | 77.282 | 89.313 | 15.148 | 1.00 | 38.80 | A |
| ATOM | 118 | NE2 | GLN | A | 65 | 78.180 | 88.709 | 13.168 | 1.00 | 38.80 | A |
| ATOM | 119 | C | GLN | A | 65 | 78.546 | 94.453 | 13.989 | 1.00 | 37.51 | A |
| ATOM | 120 | O | GLN | A | 65 | 79.556 | 94.680 | 13.313 | 1.00 | 37.51 | A |
| ATOM | 121 | N | LEU | A | 66 | 78.286 | 95.087 | 15.129 | 1.00 | 35.76 | A |
| ATOM | 122 | CA | LEU | A | 66 | 79.223 | 96.060 | 15.690 | 1.00 | 35.76 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 123 | CB | LEU | A | 66 | 78.543 | 97.380 | 16.042 | 1.00 | 36.00 | A |
| ATOM | 124 | CG | LEU | A | 66 | 78.720 | 98.549 | 15.082 | 1.00 | 36.00 | A |
| ATOM | 125 | CD1 | LEU | A | 66 | 78.392 | 99.829 | 15.846 | 1.00 | 36.00 | A |
| ATOM | 126 | CD2 | LEU | A | 66 | 80.139 | 98.613 | 14.542 | 1.00 | 36.00 | A |
| ATOM | 127 | C | LEU | A | 66 | 79.844 | 95.496 | 16.941 | 1.00 | 35.76 | A |
| ATOM | 128 | O | LEU | A | 66 | 79.228 | 95.474 | 18.009 | 1.00 | 35.76 | A |
| ATOM | 129 | N | TYR | A | 67 | 81.077 | 95.044 | 16.795 | 1.00 | 35.94 | A |
| ATOM | 130 | CA | TYR | A | 67 | 81.812 | 94.458 | 17.894 | 1.00 | 35.94 | A |
| ATOM | 131 | CB | TYR | A | 67 | 82.755 | 93.388 | 17.348 | 1.00 | 35.96 | A |
| ATOM | 132 | CG | TYR | A | 67 | 83.622 | 92.763 | 18.401 | 1.00 | 35.96 | A |
| ATOM | 133 | CD1 | TYR | A | 67 | 83.070 | 91.942 | 19.386 | 1.00 | 35.96 | A |
| ATOM | 134 | CE1 | TYR | A | 67 | 83.857 | 91.388 | 20.371 | 1.00 | 35.96 | A |
| ATOM | 135 | CD2 | TYR | A | 67 | 84.995 | 93.015 | 18.433 | 1.00 | 35.96 | A |
| ATOM | 136 | CE2 | TYR | A | 67 | 85.798 | 92.466 | 19.420 | 1.00 | 35.96 | A |
| ATOM | 137 | CZ | TYR | A | 67 | 85.222 | 91.649 | 20.386 | 1.00 | 35.96 | A |
| ATOM | 138 | OH | TYR | A | 67 | 86.014 | 91.068 | 21.350 | 1.00 | 35.96 | A |
| ATOM | 139 | C | TYR | A | 67 | 82.602 | 95.527 | 18.645 | 1.00 | 35.94 | A |
| ATOM | 140 | O | TYR | A | 67 | 83.447 | 96.220 | 18.073 | 1.00 | 35.94 | A |
| ATOM | 141 | N | CYS | A | 68 | 82.319 | 95.671 | 19.931 | 1.00 | 36.87 | A |
| ATOM | 142 | CA | CYS | A | 68 | 83.032 | 96.650 | 20.731 | 1.00 | 36.87 | A |
| ATOM | 143 | CB | CYS | A | 68 | 82.143 | 97.185 | 21.859 | 1.00 | 39.17 | A |
| ATOM | 144 | SG | CYS | A | 68 | 82.931 | 98.454 | 22.876 | 1.00 | 39.17 | A |
| ATOM | 145 | C | CYS | A | 68 | 84.277 | 96.012 | 21.325 | 1.00 | 36.87 | A |
| ATOM | 146 | O | CYS | A | 68 | 84.257 | 94.847 | 21.726 | 1.00 | 36.87 | A |
| ATOM | 147 | N | ARG | A | 69 | 85.354 | 96.791 | 21.376 | 1.00 | 38.81 | A |
| ATOM | 148 | CA | ARG | A | 69 | 86.632 | 96.343 | 21.918 | 1.00 | 38.81 | A |
| ATOM | 149 | CB | ARG | A | 69 | 87.575 | 97.541 | 22.062 | 1.00 | 84.60 | A |
| ATOM | 150 | CG | ARG | A | 69 | 89.025 | 97.200 | 22.369 | 1.00 | 84.60 | A |
| ATOM | 151 | CD | ARG | A | 69 | 89.867 | 97.018 | 21.112 | 1.00 | 84.60 | A |
| ATOM | 152 | NE | ARG | A | 69 | 90.140 | 95.610 | 20.826 | 1.00 | 84.60 | A |
| ATOM | 153 | CZ | ARG | A | 69 | 90.956 | 95.178 | 19.866 | 1.00 | 84.60 | A |
| ATOM | 154 | NH1 | ARG | A | 69 | 91.591 | 96.043 | 19.083 | 1.00 | 84.60 | A |
| ATOM | 155 | NH2 | ARG | A | 69 | 91.143 | 93.874 | 19.691 | 1.00 | 84.60 | A |
| ATOM | 156 | C | ARG | A | 69 | 86.463 | 95.638 | 23.270 | 1.00 | 38.81 | A |
| ATOM | 157 | O | ARG | A | 69 | 87.255 | 94.764 | 23.617 | 1.00 | 38.81 | A |
| ATOM | 158 | N | THR | A | 70 | 85.434 | 95.999 | 24.032 | 1.00 | 39.56 | A |
| ATOM | 159 | CA | THR | A | 70 | 85.217 | 95.367 | 25.333 | 1.00 | 39.56 | A |
| ATOM | 160 | CB | THR | A | 70 | 84.213 | 96.149 | 26.197 | 1.00 | 38.85 | A |
| ATOM | 161 | OG1 | THR | A | 70 | 82.985 | 96.325 | 25.472 | 1.00 | 38.85 | A |
| ATOM | 162 | CG2 | THR | A | 70 | 84.806 | 97.499 | 26.604 | 1.00 | 38.85 | A |
| ATOM | 163 | C | THR | A | 70 | 84.718 | 93.937 | 25.236 | 1.00 | 39.56 | A |
| ATOM | 164 | O | THR | A | 70 | 84.504 | 93.286 | 26.254 | 1.00 | 39.56 | A |
| ATOM | 165 | N | GLY | A | 71 | 84.519 | 93.455 | 24.014 | 1.00 | 39.63 | A |
| ATOM | 166 | CA | GLY | A | 71 | 84.059 | 92.092 | 23.828 | 1.00 | 39.63 | A |
| ATOM | 167 | C | GLY | A | 71 | 82.583 | 91.904 | 23.522 | 1.00 | 39.63 | A |
| ATOM | 168 | O | GLY | A | 71 | 82.109 | 90.770 | 23.480 | 1.00 | 39.63 | A |
| ATOM | 169 | N | PHE | A | 72 | 81.854 | 92.988 | 23.277 | 1.00 | 35.62 | A |
| ATOM | 170 | CA | PHE | A | 72 | 80.430 | 92.854 | 23.009 | 1.00 | 35.62 | A |
| ATOM | 171 | CB | PHE | A | 72 | 79.618 | 93.513 | 24.131 | 1.00 | 36.28 | A |
| ATOM | 172 | CG | PHE | A | 72 | 79.950 | 93.009 | 25.507 | 1.00 | 36.28 | A |
| ATOM | 173 | CD1 | PHE | A | 72 | 81.047 | 93.519 | 26.207 | 1.00 | 36.28 | A |
| ATOM | 174 | CD2 | PHE | A | 72 | 79.171 | 92.018 | 26.105 | 1.00 | 36.28 | A |
| ATOM | 175 | CE1 | PHE | A | 72 | 81.362 | 93.050 | 27.494 | 1.00 | 36.28 | A |
| ATOM | 176 | CE2 | PHE | A | 72 | 79.471 | 91.537 | 27.390 | 1.00 | 36.28 | A |
| ATOM | 177 | CZ | PHE | A | 72 | 80.570 | 92.052 | 28.087 | 1.00 | 36.28 | A |
| ATOM | 178 | C | PHE | A | 72 | 79.928 | 93.398 | 21.682 | 1.00 | 35.62 | A |
| ATOM | 179 | O | PHE | A | 72 | 80.457 | 94.363 | 21.144 | 1.00 | 35.62 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 180 | N | HIS | A | 73 | 78.886 | 92.764 | 21.158 | 1.00 | 33.67 | A |
| ATOM | 181 | CA | HIS | A | 73 | 78.274 | 93.213 | 19.918 | 1.00 | 33.67 | A |
| ATOM | 182 | CB | HIS | A | 73 | 77.775 | 92.037 | 19.073 | 1.00 | 40.05 | A |
| ATOM | 183 | CG | HIS | A | 73 | 78.866 | 91.242 | 18.432 | 1.00 | 40.05 | A |
| ATOM | 184 | CD2 | HIS | A | 73 | 79.525 | 91.415 | 17.261 | 1.00 | 40.05 | A |
| ATOM | 185 | ND1 | HIS | A | 73 | 79.401 | 90.110 | 19.008 | 1.00 | 40.05 | A |
| ATOM | 186 | CE1 | HIS | A | 73 | 80.340 | 89.618 | 18.220 | 1.00 | 40.05 | A |
| ATOM | 187 | NE2 | HIS | A | 73 | 80.436 | 90.390 | 17.152 | 1.00 | 40.05 | A |
| ATOM | 188 | C | HIS | A | 73 | 77.093 | 94.061 | 20.338 | 1.00 | 33.67 | A |
| ATOM | 189 | O | HIS | A | 73 | 76.386 | 93.724 | 21.293 | 1.00 | 33.67 | A |
| ATOM | 190 | N | LEU | A | 74 | 76.877 | 95.157 | 19.621 | 1.00 | 33.41 | A |
| ATOM | 191 | CA | LEU | A | 74 | 75.773 | 96.057 | 19.923 | 1.00 | 33.41 | A |
| ATOM | 192 | CB | LEU | A | 74 | 75.961 | 97.379 | 19.172 | 1.00 | 43.56 | A |
| ATOM | 193 | CG | LEU | A | 74 | 75.037 | 98.526 | 19.589 | 1.00 | 43.56 | A |
| ATOM | 194 | CD1 | LEU | A | 74 | 75.582 | 99.142 | 20.841 | 1.00 | 43.56 | A |
| ATOM | 195 | CD2 | LEU | A | 74 | 74.971 | 99.582 | 18.510 | 1.00 | 43.56 | A |
| ATOM | 196 | C | LEU | A | 74 | 74.411 | 95.454 | 19.552 | 1.00 | 33.41 | A |
| ATOM | 197 | O | LEU | A | 74 | 74.210 | 94.973 | 18.436 | 1.00 | 33.41 | A |
| ATOM | 198 | N | GLU | A | 75 | 73.476 | 95.496 | 20.493 | 1.00 | 35.72 | A |
| ATOM | 199 | CA | GLU | A | 75 | 72.131 | 94.981 | 20.268 | 1.00 | 35.72 | A |
| ATOM | 200 | CB | GLU | A | 75 | 71.783 | 93.910 | 21.302 | 1.00 | 45.77 | A |
| ATOM | 201 | CG | GLU | A | 75 | 72.607 | 92.658 | 21.221 | 1.00 | 45.77 | A |
| ATOM | 202 | CD | GLU | A | 75 | 72.372 | 91.752 | 22.403 | 1.00 | 45.77 | A |
| ATOM | 203 | OE1 | GLU | A | 75 | 72.686 | 92.158 | 23.541 | 1.00 | 45.77 | A |
| ATOM | 204 | OE2 | GLU | A | 75 | 71.868 | 90.630 | 22.199 | 1.00 | 45.77 | A |
| ATOM | 205 | C | GLU | A | 75 | 71.098 | 96.094 | 20.375 | 1.00 | 35.72 | A |
| ATOM | 206 | O | GLU | A | 75 | 71.121 | 96.895 | 21.312 | 1.00 | 35.72 | A |
| ATOM | 207 | N | ILE | A | 76 | 70.188 | 96.137 | 19.411 | 1.00 | 35.50 | A |
| ATOM | 208 | CA | ILE | A | 76 | 69.114 | 97.119 | 19.409 | 1.00 | 35.50 | A |
| ATOM | 209 | CB | ILE | A | 76 | 69.074 | 97.892 | 18.087 | 1.00 | 29.67 | A |
| ATOM | 210 | CG2 | ILE | A | 76 | 67.936 | 98.899 | 18.119 | 1.00 | 29.67 | A |
| ATOM | 211 | CG1 | ILE | A | 76 | 70.415 | 98.584 | 17.844 | 1.00 | 29.67 | A |
| ATOM | 212 | CD1 | ILE | A | 76 | 70.513 | 99.261 | 16.489 | 1.00 | 29.67 | A |
| ATOM | 213 | C | ILE | A | 76 | 67.815 | 96.320 | 19.576 | 1.00 | 35.50 | A |
| ATOM | 214 | O | ILE | A | 76 | 67.299 | 95.727 | 18.619 | 1.00 | 35.50 | A |
| ATOM | 215 | N | PHE | A | 77 | 67.297 | 96.298 | 20.800 | 1.00 | 38.63 | A |
| ATOM | 216 | CA | PHE | A | 77 | 66.081 | 95.552 | 21.109 | 1.00 | 38.63 | A |
| ATOM | 217 | CB | PHE | A | 77 | 66.041 | 95.241 | 22.604 | 1.00 | 45.88 | A |
| ATOM | 218 | CG | PHE | A | 77 | 67.023 | 94.195 | 23.022 | 1.00 | 45.88 | A |
| ATOM | 219 | CD1 | PHE | A | 77 | 66.796 | 92.855 | 22.734 | 1.00 | 45.88 | A |
| ATOM | 220 | CD2 | PHE | A | 77 | 68.198 | 94.547 | 23.671 | 1.00 | 45.88 | A |
| ATOM | 221 | CE1 | PHE | A | 77 | 67.736 | 91.878 | 23.089 | 1.00 | 45.88 | A |
| ATOM | 222 | CE2 | PHE | A | 77 | 69.135 | 93.576 | 24.025 | 1.00 | 45.88 | A |
| ATOM | 223 | CZ | PHE | A | 77 | 68.900 | 92.240 | 23.730 | 1.00 | 45.88 | A |
| ATOM | 224 | C | PHE | A | 77 | 64.778 | 96.222 | 20.690 | 1.00 | 38.63 | A |
| ATOM | 225 | O | PHE | A | 77 | 64.693 | 97.451 | 20.575 | 1.00 | 38.63 | A |
| ATOM | 226 | N | PRO | A | 78 | 63.734 | 95.411 | 20.463 | 1.00 | 51.93 | A |
| ATOM | 227 | CD | PRO | A | 78 | 63.715 | 93.942 | 20.576 | 1.00 | 44.46 | A |
| ATOM | 228 | CA | PRO | A | 78 | 62.421 | 95.926 | 20.055 | 1.00 | 51.93 | A |
| ATOM | 229 | CB | PRO | A | 78 | 61.557 | 94.669 | 19.992 | 1.00 | 44.46 | A |
| ATOM | 230 | CG | PRO | A | 78 | 62.561 | 93.576 | 19.683 | 1.00 | 44.46 | A |
| ATOM | 231 | C | PRO | A | 78 | 61.873 | 96.958 | 21.040 | 1.00 | 51.93 | A |
| ATOM | 232 | O | PRO | A | 78 | 61.151 | 97.869 | 20.640 | 1.00 | 51.93 | A |
| ATOM | 233 | N | ASN | A | 79 | 62.210 | 96.822 | 22.324 | 1.00 | 45.34 | A |
| ATOM | 234 | CA | ASN | A | 79 | 61.725 | 97.791 | 23.298 | 1.00 | 45.34 | A |
| ATOM | 235 | CB | ASN | A | 79 | 61.605 | 97.187 | 24.702 | 1.00 | 48.61 | A |
| ATOM | 236 | CG | ASN | A | 79 | 62.896 | 96.597 | 25.218 | 1.00 | 48.61 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|----|--------|---------|--------|------|-------|---|
| ATOM | 237 | OD1 | ASN | A | 79 | 63.992 | 97.057 | 24.900 | 1.00 | 48.61 | A |
| ATOM | 238 | ND2 | ASN | A | 79 | 62.732 | 95.578 | 26.057 | 1.00 | 48.61 | A |
| ATOM | 239 | C | ASN | A | 79 | 62.519 | 99.092 | 23.373 | 1.00 | 45.34 | A |
| ATOM | 240 | O | ASN | A | 79 | 62.285 | 99.905 | 24.265 | 1.00 | 45.34 | A |
| ATOM | 241 | N | GLY | A | 80 | 63.448 | 99.296 | 22.440 | 1.00 | 37.82 | A |
| ATOM | 242 | CA | GLY | A | 80 | 64.205 | 100.539 | 22.422 | 1.00 | 37.82 | A |
| ATOM | 243 | C | GLY | A | 80 | 65.462 | 100.531 | 23.261 | 1.00 | 37.82 | A |
| ATOM | 244 | O | GLY | A | 80 | 66.243 | 101.484 | 23.249 | 1.00 | 37.82 | A |
| ATOM | 245 | N | THR | A | 81 | 65.648 | 99.445 | 23.996 | 1.00 | 41.20 | A |
| ATOM | 246 | CA | THR | A | 81 | 66.808 | 99.263 | 24.851 | 1.00 | 41.20 | A |
| ATOM | 247 | CB | THR | A | 81 | 66.494 | 98.178 | 25.909 | 1.00 | 52.59 | A |
| ATOM | 248 | OG1 | THR | A | 81 | 65.862 | 98.805 | 27.035 | 1.00 | 52.59 | A |
| ATOM | 249 | CG2 | THR | A | 81 | 67.747 | 97.431 | 26.351 | 1.00 | 52.59 | A |
| ATOM | 250 | C | THR | A | 81 | 68.045 | 98.892 | 24.026 | 1.00 | 41.20 | A |
| ATOM | 251 | O | THR | A | 81 | 67.939 | 98.285 | 22.954 | 1.00 | 41.20 | A |
| ATOM | 252 | N | ILE | A | 82 | 69.214 | 99.292 | 24.515 | 1.00 | 48.38 | A |
| ATOM | 253 | CA | ILE | A | 82 | 70.471 | 99.000 | 23.843 | 1.00 | 48.38 | A |
| ATOM | 254 | CB | ILE | A | 82 | 71.226 | 100.285 | 23.488 | 1.00 | 35.38 | A |
| ATOM | 255 | CG2 | ILE | A | 82 | 72.571 | 99.939 | 22.852 | 1.00 | 35.38 | A |
| ATOM | 256 | CG1 | ILE | A | 82 | 70.371 | 101.154 | 22.565 | 1.00 | 35.38 | A |
| ATOM | 257 | CD1 | ILE | A | 82 | 70.012 | 100.498 | 21.256 | 1.00 | 35.38 | A |
| ATOM | 258 | C | ILE | A | 82 | 71.307 | 98.189 | 24.819 | 1.00 | 48.38 | A |
| ATOM | 259 | O | ILE | A | 82 | 71.405 | 98.530 | 26.001 | 1.00 | 48.38 | A |
| ATOM | 260 | N | GLN | A | 83 | 71.917 | 97.118 | 24.329 | 1.00 | 52.04 | A |
| ATOM | 261 | CA | GLN | A | 83 | 72.709 | 96.252 | 25.190 | 1.00 | 52.04 | A |
| ATOM | 262 | CB | GLN | A | 83 | 71.803 | 95.161 | 25.761 | 1.00 | 80.70 | A |
| ATOM | 263 | CG | GLN | A | 83 | 72.254 | 94.568 | 27.073 | 1.00 | 80.70 | A |
| ATOM | 264 | CD | GLN | A | 83 | 71.400 | 93.376 | 27.485 | 1.00 | 80.70 | A |
| ATOM | 265 | OE1 | GLN | A | 83 | 70.179 | 93.369 | 27.296 | 1.00 | 80.70 | A |
| ATOM | 266 | NE2 | GLN | A | 83 | 72.040 | 92.366 | 28.064 | 1.00 | 80.70 | A |
| ATOM | 267 | C | GLN | A | 83 | 73.833 | 95.616 | 24.383 | 1.00 | 52.04 | A |
| ATOM | 268 | O | GLN | A | 83 | 73.867 | 95.728 | 23.156 | 1.00 | 52.04 | A |
| ATOM | 269 | N | GLY | A | 84 | 74.750 | 94.949 | 25.073 | 1.00 | 38.67 | A |
| ATOM | 270 | CA | GLY | A | 84 | 75.844 | 94.302 | 24.385 | 1.00 | 38.67 | A |
| ATOM | 271 | C | GLY | A | 84 | 75.796 | 92.805 | 24.623 | 1.00 | 38.67 | A |
| ATOM | 272 | O | GLY | A | 84 | 75.304 | 92.364 | 25.664 | 1.00 | 38.67 | A |
| ATOM | 273 | N | THR | A | 85 | 76.290 | 92.025 | 23.659 | 1.00 | 40.58 | A |
| ATOM | 274 | CA | THR | A | 85 | 76.321 | 90.568 | 23.786 | 1.00 | 40.58 | A |
| ATOM | 275 | CB | THR | A | 85 | 75.135 | 89.868 | 23.079 | 1.00 | 33.27 | A |
| ATOM | 276 | OG1 | THR | A | 85 | 75.306 | 88.451 | 23.194 | 1.00 | 33.27 | A |
| ATOM | 277 | CG2 | THR | A | 85 | 75.099 | 90.207 | 21.600 | 1.00 | 33.27 | A |
| ATOM | 278 | C | THR | A | 85 | 77.587 | 89.978 | 23.190 | 1.00 | 40.58 | A |
| ATOM | 279 | O | THR | A | 85 | 78.081 | 90.432 | 22.151 | 1.00 | 40.58 | A |
| ATOM | 280 | N | ARG | A | 86 | 78.099 | 88.951 | 23.855 | 1.00 | 40.42 | A |
| ATOM | 281 | CA | ARG | A | 86 | 79.298 | 88.273 | 23.397 | 1.00 | 40.42 | A |
| ATOM | 282 | CB | ARG | A | 86 | 79.932 | 87.503 | 24.556 | 1.00 | 70.68 | A |
| ATOM | 283 | CG | ARG | A | 86 | 80.523 | 88.407 | 25.615 | 1.00 | 70.68 | A |
| ATOM | 284 | CD | ARG | A | 86 | 81.144 | 87.617 | 26.756 | 1.00 | 70.68 | A |
| ATOM | 285 | NE | ARG | A | 86 | 81.950 | 88.468 | 27.632 | 1.00 | 70.68 | A |
| ATOM | 286 | CZ | ARG | A | 86 | 83.042 | 89.129 | 27.244 | 1.00 | 70.68 | A |
| ATOM | 287 | NH1 | ARG | A | 86 | 83.467 | 89.039 | 25.987 | 1.00 | 70.68 | A |
| ATOM | 288 | NH2 | ARG | A | 86 | 83.715 | 89.880 | 28.111 | 1.00 | 70.68 | A |
| ATOM | 289 | C | ARG | A | 86 | 78.985 | 87.327 | 22.232 | 1.00 | 40.42 | A |
| ATOM | 290 | O | ARG | A | 86 | 79.860 | 87.004 | 21.436 | 1.00 | 40.42 | A |
| ATOM | 291 | N | LYS | A | 87 | 77.726 | 86.915 | 22.118 | 1.00 | 42.09 | A |
| ATOM | 292 | CA | LYS | A | 87 | 77.316 | 85.990 | 21.065 | 1.00 | 42.09 | A |
| ATOM | 293 | CB | LYS | A | 87 | 75.871 | 85.541 | 21.301 | 1.00 | 79.48 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 294 | CG | LYS | A | 87 | 75.595 | 85.082 | 22.728 | 1.00 | 79.48 | A |
| ATOM | 295 | CD | LYS | A | 87 | 76.401 | 83.843 | 23.133 | 1.00 | 79.48 | A |
| ATOM | 296 | CE | LYS | A | 87 | 75.866 | 82.573 | 22.474 | 1.00 | 79.48 | A |
| ATOM | 297 | NZ | LYS | A | 87 | 76.588 | 81.349 | 22.918 | 1.00 | 79.48 | A |
| ATOM | 298 | C | LYS | A | 87 | 77.456 | 86.563 | 19.651 | 1.00 | 42.09 | A |
| ATOM | 299 | O | LYS | A | 87 | 77.157 | 87.733 | 19.402 | 1.00 | 42.09 | A |
| ATOM | 300 | N | ASP | A | 88 | 77.924 | 85.727 | 18.728 | 1.00 | 33.81 | A |
| ATOM | 301 | CA | ASP | A | 88 | 78.084 | 86.131 | 17.339 | 1.00 | 33.81 | A |
| ATOM | 302 | CB | ASP | A | 88 | 79.134 | 85.251 | 16.652 | 1.00 | 40.10 | A |
| ATOM | 303 | CG | ASP | A | 88 | 79.427 | 85.688 | 15.228 | 1.00 | 40.10 | A |
| ATOM | 304 | OD1 | ASP | A | 88 | 79.168 | 86.859 | 14.884 | 1.00 | 40.10 | A |
| ATOM | 305 | OD2 | ASP | A | 88 | 79.934 | 84.864 | 14.446 | 1.00 | 40.10 | A |
| ATOM | 306 | C | ASP | A | 88 | 76.726 | 85.965 | 16.678 | 1.00 | 33.81 | A |
| ATOM | 307 | O | ASP | A | 88 | 75.917 | 85.154 | 17.121 | 1.00 | 33.81 | A |
| ATOM | 308 | N | HIS | A | 89 | 76.465 | 86.750 | 15.641 | 1.00 | 37.93 | A |
| ATOM | 309 | CA | HIS | A | 89 | 75.197 | 86.678 | 14.924 | 1.00 | 37.93 | A |
| ATOM | 310 | CB | HIS | A | 89 | 75.188 | 85.472 | 13.974 | 1.00 | 49.61 | A |
| ATOM | 311 | CG | HIS | A | 89 | 76.040 | 85.648 | 12.753 | 1.00 | 49.61 | A |
| ATOM | 312 | CD2 | HIS | A | 89 | 75.749 | 86.154 | 11.528 | 1.00 | 49.61 | A |
| ATOM | 313 | ND1 | HIS | A | 89 | 77.366 | 85.271 | 12.704 | 1.00 | 49.61 | A |
| ATOM | 314 | CE1 | HIS | A | 89 | 77.852 | 85.534 | 11.502 | 1.00 | 49.61 | A |
| ATOM | 315 | NE2 | HIS | A | 89 | 76.891 | 86.070 | 10.769 | 1.00 | 49.61 | A |
| ATOM | 316 | C | HIS | A | 89 | 73.949 | 86.625 | 15.821 | 1.00 | 37.93 | A |
| ATOM | 317 | O | HIS | A | 89 | 72.981 | 85.930 | 15.505 | 1.00 | 37.93 | A |
| ATOM | 318 | N | SER | A | 90 | 73.962 | 87.357 | 16.932 | 1.00 | 38.43 | A |
| ATOM | 319 | CA | SER | A | 90 | 72.804 | 87.383 | 17.821 | 1.00 | 38.43 | A |
| ATOM | 320 | CB | SER | A | 90 | 73.128 | 88.155 | 19.100 | 1.00 | 59.03 | A |
| ATOM | 321 | OG | SER | A | 90 | 73.433 | 89.506 | 18.806 | 1.00 | 59.03 | A |
| ATOM | 322 | C | SER | A | 90 | 71.635 | 88.054 | 17.083 | 1.00 | 38.43 | A |
| ATOM | 323 | O | SER | A | 90 | 71.833 | 88.940 | 16.255 | 1.00 | 38.43 | A |
| ATOM | 324 | N | ARG | A | 91 | 70.421 | 87.625 | 17.400 | 1.00 | 39.55 | A |
| ATOM | 325 | CA | ARG | A | 91 | 69.217 | 88.135 | 16.760 | 1.00 | 39.55 | A |
| ATOM | 326 | CB | ARG | A | 91 | 67.986 | 87.582 | 17.487 | 1.00 | 62.11 | A |
| ATOM | 327 | CG | ARG | A | 91 | 66.648 | 88.005 | 16.898 | 1.00 | 62.11 | A |
| ATOM | 328 | CD | ARG | A | 91 | 65.487 | 87.392 | 17.666 | 1.00 | 62.11 | A |
| ATOM | 329 | NE | ARG | A | 91 | 64.208 | 87.973 | 17.262 | 1.00 | 62.11 | A |
| ATOM | 330 | CZ | ARG | A | 91 | 63.080 | 87.875 | 17.964 | 1.00 | 62.11 | A |
| ATOM | 331 | NH1 | ARG | A | 91 | 63.062 | 87.210 | 19.114 | 1.00 | 62.11 | A |
| ATOM | 332 | NH2 | ARG | A | 91 | 61.973 | 88.465 | 17.528 | 1.00 | 62.11 | A |
| ATOM | 333 | C | ARG | A | 91 | 69.127 | 89.652 | 16.694 | 1.00 | 39.55 | A |
| ATOM | 334 | O | ARG | A | 91 | 68.736 | 90.227 | 15.673 | 1.00 | 39.55 | A |
| ATOM | 335 | N | PHE | A | 92 | 69.486 | 90.311 | 17.785 | 1.00 | 37.77 | A |
| ATOM | 336 | CA | PHE | A | 92 | 69.380 | 91.753 | 17.817 | 1.00 | 37.77 | A |
| ATOM | 337 | CB | PHE | A | 92 | 68.732 | 92.149 | 19.133 | 1.00 | 39.75 | A |
| ATOM | 338 | CG | PHE | A | 92 | 67.344 | 91.613 | 19.276 | 1.00 | 39.75 | A |
| ATOM | 339 | CD1 | PHE | A | 92 | 66.322 | 92.078 | 18.441 | 1.00 | 39.75 | A |
| ATOM | 340 | CD2 | PHE | A | 92 | 67.056 | 90.611 | 20.204 | 1.00 | 39.75 | A |
| ATOM | 341 | CE1 | PHE | A | 92 | 65.033 | 91.551 | 18.527 | 1.00 | 39.75 | A |
| ATOM | 342 | CE2 | PHE | A | 92 | 65.770 | 90.077 | 20.298 | 1.00 | 39.75 | A |
| ATOM | 343 | CZ | PHE | A | 92 | 64.756 | 90.550 | 19.456 | 1.00 | 39.75 | A |
| ATOM | 344 | C | PHE | A | 92 | 70.676 | 92.502 | 17.577 | 1.00 | 37.77 | A |
| ATOM | 345 | O | PHE | A | 92 | 70.695 | 93.728 | 17.569 | 1.00 | 37.77 | A |
| ATOM | 346 | N | GLY | A | 93 | 71.748 | 91.747 | 17.358 | 1.00 | 36.90 | A |
| ATOM | 347 | CA | GLY | A | 93 | 73.042 | 92.335 | 17.084 | 1.00 | 36.90 | A |
| ATOM | 348 | C | GLY | A | 93 | 73.276 | 92.459 | 15.587 | 1.00 | 36.90 | A |
| ATOM | 349 | O | GLY | A | 93 | 74.302 | 92.996 | 15.158 | 1.00 | 36.90 | A |
| ATOM | 350 | N | ILE | A | 94 | 72.337 | 91.958 | 14.784 | 1.00 | 32.21 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 351 | CA | ILE | A | 94 | 72.472 | 92.053 | 13.342 | 1.00 | 32.21 | A |
| ATOM | 352 | CB | ILE | A | 94 | 71.706 | 90.905 | 12.633 | 1.00 | 31.38 | A |
| ATOM | 353 | CG2 | ILE | A | 94 | 71.667 | 91.141 | 11.107 | 1.00 | 31.38 | A |
| ATOM | 354 | CG1 | ILE | A | 94 | 72.414 | 89.581 | 12.958 | 1.00 | 31.38 | A |
| ATOM | 355 | CD1 | ILE | A | 94 | 71.877 | 88.372 | 12.262 | 1.00 | 31.38 | A |
| ATOM | 356 | C | ILE | A | 94 | 71.962 | 93.431 | 12.934 | 1.00 | 32.21 | A |
| ATOM | 357 | O | ILE | A | 94 | 70.797 | 93.771 | 13.147 | 1.00 | 32.21 | A |
| ATOM | 358 | N | LEU | A | 95 | 72.854 | 94.224 | 12.351 | 1.00 | 35.55 | A |
| ATOM | 359 | CA | LEU | A | 95 | 72.535 | 95.596 | 11.982 | 1.00 | 35.55 | A |
| ATOM | 360 | CB | LEU | A | 95 | 73.436 | 96.543 | 12.790 | 1.00 | 30.56 | A |
| ATOM | 361 | CG | LEU | A | 95 | 73.724 | 96.086 | 14.230 | 1.00 | 30.56 | A |
| ATOM | 362 | CD1 | LEU | A | 95 | 74.864 | 96.922 | 14.819 | 1.00 | 30.56 | A |
| ATOM | 363 | CD2 | LEU | A | 95 | 72.451 | 96.186 | 15.089 | 1.00 | 30.56 | A |
| ATOM | 364 | C | LEU | A | 95 | 72.671 | 95.920 | 10.502 | 1.00 | 35.55 | A |
| ATOM | 365 | O | LEU | A | 95 | 73.285 | 95.179 | 9.733 | 1.00 | 35.55 | A |
| ATOM | 366 | N | GLU | A | 96 | 72.094 | 97.050 | 10.116 | 1.00 | 41.25 | A |
| ATOM | 367 | CA | GLU | A | 96 | 72.139 | 97.510 | 8.739 | 1.00 | 41.25 | A |
| ATOM | 368 | CB | GLU | A | 96 | 70.729 | 97.687 | 8.173 | 1.00 | 51.47 | A |
| ATOM | 369 | CG | GLU | A | 96 | 70.713 | 97.871 | 6.669 | 1.00 | 51.47 | A |
| ATOM | 370 | CD | GLU | A | 96 | 69.514 | 98.653 | 6.172 | 1.00 | 51.47 | A |
| ATOM | 371 | OE1 | GLU | A | 96 | 68.391 | 98.423 | 6.670 | 1.00 | 51.47 | A |
| ATOM | 372 | OE2 | GLU | A | 96 | 69.690 | 99.497 | 5.269 | 1.00 | 51.47 | A |
| ATOM | 373 | C | GLU | A | 96 | 72.827 | 98.860 | 8.751 | 1.00 | 41.25 | A |
| ATOM | 374 | O | GLU | A | 96 | 72.385 | 99.772 | 9.453 | 1.00 | 41.25 | A |
| ATOM | 375 | N | PHE | A | 97 | 73.913 | 98.991 | 7.995 | 1.00 | 39.56 | A |
| ATOM | 376 | CA | PHE | A | 97 | 74.609 | 100.267 | 7.948 | 1.00 | 39.56 | A |
| ATOM | 377 | CB | PHE | A | 97 | 76.115 | 100.063 | 7.831 | 1.00 | 37.09 | A |
| ATOM | 378 | CG | PHE | A | 97 | 76.810 | 99.968 | 9.157 | 1.00 | 37.09 | A |
| ATOM | 379 | CD1 | PHE | A | 97 | 76.422 | 99.012 | 10.100 | 1.00 | 37.09 | A |
| ATOM | 380 | CD2 | PHE | A | 97 | 77.850 | 100.838 | 9.471 | 1.00 | 37.09 | A |
| ATOM | 381 | CE1 | PHE | A | 97 | 77.064 | 98.921 | 11.338 | 1.00 | 37.09 | A |
| ATOM | 382 | CE2 | PHE | A | 97 | 78.505 | 100.759 | 10.710 | 1.00 | 37.09 | A |
| ATOM | 383 | CZ | PHE | A | 97 | 78.109 | 99.797 | 11.646 | 1.00 | 37.09 | A |
| ATOM | 384 | C | PHE | A | 97 | 74.101 | 101.133 | 6.808 | 1.00 | 39.56 | A |
| ATOM | 385 | O | PHE | A | 97 | 73.987 | 100.687 | 5.667 | 1.00 | 39.56 | A |
| ATOM | 386 | N | ILE | A | 98 | 73.787 | 102.379 | 7.133 | 1.00 | 45.56 | A |
| ATOM | 387 | CA | ILE | A | 98 | 73.279 | 103.309 | 6.147 | 1.00 | 45.56 | A |
| ATOM | 388 | CB | ILE | A | 98 | 71.864 | 103.776 | 6.529 | 1.00 | 42.37 | A |
| ATOM | 389 | CG2 | ILE | A | 98 | 71.379 | 104.819 | 5.543 | 1.00 | 42.37 | A |
| ATOM | 390 | CG1 | ILE | A | 98 | 70.925 | 102.565 | 6.564 | 1.00 | 42.37 | A |
| ATOM | 391 | CD1 | ILE | A | 98 | 69.815 | 102.675 | 7.576 | 1.00 | 42.37 | A |
| ATOM | 392 | C | ILE | A | 98 | 74.197 | 104.510 | 6.042 | 1.00 | 45.56 | A |
| ATOM | 393 | O | ILE | A | 98 | 74.421 | 105.219 | 7.020 | 1.00 | 45.56 | A |
| ATOM | 394 | N | SER | A | 99 | 74.738 | 104.726 | 4.853 | 1.00 | 39.32 | A |
| ATOM | 395 | CA | SER | A | 99 | 75.622 | 105.848 | 4.607 | 1.00 | 39.32 | A |
| ATOM | 396 | CB | SER | A | 99 | 76.440 | 105.597 | 3.342 | 1.00 | 55.24 | A |
| ATOM | 397 | OG | SER | A | 99 | 77.208 | 106.737 | 2.999 | 1.00 | 55.24 | A |
| ATOM | 398 | C | SER | A | 99 | 74.770 | 107.104 | 4.436 | 1.00 | 39.32 | A |
| ATOM | 399 | O | SER | A | 99 | 73.955 | 107.188 | 3.514 | 1.00 | 39.32 | A |
| ATOM | 400 | N | ILE | A | 100 | 74.949 | 108.071 | 5.332 | 1.00 | 49.40 | A |
| ATOM | 401 | CA | ILE | A | 100 | 74.188 | 109.315 | 5.264 | 1.00 | 49.40 | A |
| ATOM | 402 | CB | ILE | A | 100 | 73.907 | 109.865 | 6.685 | 1.00 | 40.10 | A |
| ATOM | 403 | CG2 | ILE | A | 100 | 73.193 | 111.209 | 6.595 | 1.00 | 40.10 | A |
| ATOM | 404 | CG1 | ILE | A | 100 | 73.068 | 108.857 | 7.480 | 1.00 | 40.10 | A |
| ATOM | 405 | CD1 | ILE | A | 100 | 71.660 | 108.634 | 6.933 | 1.00 | 40.10 | A |
| ATOM | 406 | C | ILE | A | 100 | 74.934 | 110.374 | 4.441 | 1.00 | 49.40 | A |
| ATOM | 407 | O | ILE | A | 100 | 74.324 | 111.168 | 3.723 | 1.00 | 49.40 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 408 | N | ALA | A | 101 | 76.258 | 110.369 | 4.552 | 1.00 | 45.08 | A |
| ATOM | 409 | CA | ALA | A | 101 | 77.112 | 111.305 | 3.832 | 1.00 | 45.08 | A |
| ATOM | 410 | CB | ALA | A | 101 | 76.842 | 112.739 | 4.295 | 1.00 | 35.21 | A |
| ATOM | 411 | C | ALA | A | 101 | 78.545 | 110.907 | 4.140 | 1.00 | 45.08 | A |
| ATOM | 412 | O | ALA | A | 101 | 78.770 | 109.913 | 4.822 | 1.00 | 45.08 | A |
| ATOM | 413 | N | VAL | A | 102 | 79.518 | 111.663 | 3.649 | 1.00 | 46.06 | A |
| ATOM | 414 | CA | VAL | A | 102 | 80.907 | 111.317 | 3.923 | 1.00 | 46.06 | A |
| ATOM | 415 | CB | VAL | A | 102 | 81.895 | 112.255 | 3.178 | 1.00 | 47.26 | A |
| ATOM | 416 | CG1 | VAL | A | 102 | 83.329 | 111.816 | 3.452 | 1.00 | 47.26 | A |
| ATOM | 417 | CG2 | VAL | A | 102 | 81.612 | 112.237 | 1.676 | 1.00 | 47.26 | A |
| ATOM | 418 | C | VAL | A | 102 | 81.205 | 111.397 | 5.421 | 1.00 | 46.06 | A |
| ATOM | 419 | O | VAL | A | 102 | 81.063 | 112.456 | 6.035 | 1.00 | 46.06 | A |
| ATOM | 420 | N | GLY | A | 103 | 81.610 | 110.268 | 6.000 | 1.00 | 36.05 | A |
| ATOM | 421 | CA | GLY | A | 103 | 81.938 | 110.219 | 7.414 | 1.00 | 36.05 | A |
| ATOM | 422 | C | GLY | A | 103 | 80.764 | 110.052 | 8.359 | 1.00 | 36.05 | A |
| ATOM | 423 | O | GLY | A | 103 | 80.955 | 110.004 | 9.571 | 1.00 | 36.05 | A |
| ATOM | 424 | N | LEU | A | 104 | 79.550 | 109.963 | 7.827 | 1.00 | 42.00 | A |
| ATOM | 425 | CA | LEU | A | 104 | 78.367 | 109.816 | 8.675 | 1.00 | 42.00 | A |
| ATOM | 426 | CB | LEU | A | 104 | 77.425 | 111.019 | 8.526 | 1.00 | 39.82 | A |
| ATOM | 427 | CG | LEU | A | 104 | 77.926 | 112.428 | 8.858 | 1.00 | 39.82 | A |
| ATOM | 428 | CD1 | LEU | A | 104 | 76.782 | 113.414 | 8.649 | 1.00 | 39.82 | A |
| ATOM | 429 | CD2 | LEU | A | 104 | 78.435 | 112.492 | 10.297 | 1.00 | 39.82 | A |
| ATOM | 430 | C | LEU | A | 104 | 77.589 | 108.562 | 8.334 | 1.00 | 42.00 | A |
| ATOM | 431 | O | LEU | A | 104 | 77.488 | 108.168 | 7.170 | 1.00 | 42.00 | A |
| ATOM | 432 | N | VAL | A | 105 | 77.018 | 107.939 | 9.352 | 1.00 | 39.38 | A |
| ATOM | 433 | CA | VAL | A | 105 | 76.251 | 106.740 | 9.116 | 1.00 | 39.38 | A |
| ATOM | 434 | CB | VAL | A | 105 | 77.105 | 105.476 | 9.327 | 1.00 | 33.62 | A |
| ATOM | 435 | CG1 | VAL | A | 105 | 78.323 | 105.503 | 8.416 | 1.00 | 33.62 | A |
| ATOM | 436 | CG2 | VAL | A | 105 | 77.531 | 105.393 | 10.793 | 1.00 | 33.62 | A |
| ATOM | 437 | C | VAL | A | 105 | 75.072 | 106.645 | 10.055 | 1.00 | 39.38 | A |
| ATOM | 438 | O | VAL | A | 105 | 74.956 | 107.392 | 11.032 | 1.00 | 39.38 | A |
| ATOM | 439 | N | SER | A | 106 | 74.190 | 105.713 | 9.728 | 1.00 | 38.61 | A |
| ATOM | 440 | CA | SER | A | 106 | 73.029 | 105.416 | 10.539 | 1.00 | 38.61 | A |
| ATOM | 441 | CB | SER | A | 106 | 71.750 | 105.863 | 9.845 | 1.00 | 57.92 | A |
| ATOM | 442 | OG | SER | A | 106 | 71.640 | 107.272 | 9.908 | 1.00 | 57.92 | A |
| ATOM | 443 | C | SER | A | 106 | 73.076 | 103.901 | 10.703 | 1.00 | 38.61 | A |
| ATOM | 444 | O | SER | A | 106 | 73.497 | 103.182 | 9.805 | 1.00 | 38.61 | A |
| ATOM | 445 | N | ILE | A | 107 | 72.660 | 103.428 | 11.863 | 1.00 | 37.16 | A |
| ATOM | 446 | CA | ILE | A | 107 | 72.693 | 102.018 | 12.159 | 1.00 | 37.16 | A |
| ATOM | 447 | CB | ILE | A | 107 | 73.662 | 101.759 | 13.323 | 1.00 | 29.59 | A |
| ATOM | 448 | CG2 | ILE | A | 107 | 73.694 | 100.285 | 13.658 | 1.00 | 29.59 | A |
| ATOM | 449 | CG1 | ILE | A | 107 | 75.054 | 102.280 | 12.939 | 1.00 | 29.59 | A |
| ATOM | 450 | CD1 | ILE | A | 107 | 76.061 | 102.269 | 14.068 | 1.00 | 29.59 | A |
| ATOM | 451 | C | ILE | A | 107 | 71.304 | 101.535 | 12.521 | 1.00 | 37.16 | A |
| ATOM | 452 | O | ILE | A | 107 | 70.704 | 102.012 | 13.478 | 1.00 | 37.16 | A |
| ATOM | 453 | N | ARG | A | 108 | 70.807 | 100.570 | 11.755 | 1.00 | 46.61 | A |
| ATOM | 454 | CA | ARG | A | 108 | 69.485 | 100.029 | 11.989 | 1.00 | 46.61 | A |
| ATOM | 455 | CB | ARG | A | 108 | 68.654 | 100.169 | 10.725 | 1.00 | 57.86 | A |
| ATOM | 456 | CG | ARG | A | 108 | 67.182 | 100.039 | 10.982 | 1.00 | 57.86 | A |
| ATOM | 457 | CD | ARG | A | 108 | 66.395 | 100.077 | 9.706 | 1.00 | 57.86 | A |
| ATOM | 458 | NE | ARG | A | 108 | 64.978 | 100.261 | 9.982 | 1.00 | 57.86 | A |
| ATOM | 459 | CZ | ARG | A | 108 | 64.012 | 100.019 | 9.104 | 1.00 | 57.86 | A |
| ATOM | 460 | NH1 | ARG | A | 108 | 64.317 | 99.575 | 7.890 | 1.00 | 57.86 | A |
| ATOM | 461 | NH2 | ARG | A | 108 | 62.745 | 100.230 | 9.437 | 1.00 | 57.86 | A |
| ATOM | 462 | C | ARG | A | 108 | 69.484 | 98.564 | 12.434 | 1.00 | 46.61 | A |
| ATOM | 463 | O | ARG | A | 108 | 70.154 | 97.722 | 11.836 | 1.00 | 46.61 | A |
| ATOM | 464 | N | GLY | A | 109 | 68.736 | 98.269 | 13.498 | 1.00 | 40.40 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 465 | CA | GLY | A | 109 | 68.637 | 96.903 | 13.968 | 1.00 | 40.40 | A |
| ATOM | 466 | C | GLY | A | 109 | 67.728 | 96.209 | 12.969 | 1.00 | 40.40 | A |
| ATOM | 467 | O | GLY | A | 109 | 66.565 | 96.600 | 12.800 | 1.00 | 40.40 | A |
| ATOM | 468 | N | VAL | A | 110 | 68.251 | 95.196 | 12.282 | 1.00 | 36.06 | A |
| ATOM | 469 | CA | VAL | A | 110 | 67.460 | 94.495 | 11.288 | 1.00 | 36.06 | A |
| ATOM | 470 | CB | VAL | A | 110 | 68.275 | 93.377 | 10.602 | 1.00 | 32.16 | A |
| ATOM | 471 | CG1 | VAL | A | 110 | 67.360 | 92.538 | 9.711 | 1.00 | 32.16 | A |
| ATOM | 472 | CG2 | VAL | A | 110 | 69.395 | 93.995 | 9.762 | 1.00 | 32.16 | A |
| ATOM | 473 | C | VAL | A | 110 | 66.194 | 93.894 | 11.876 | 1.00 | 36.06 | A |
| ATOM | 474 | O | VAL | A | 110 | 65.109 | 94.124 | 11.363 | 1.00 | 36.06 | A |
| ATOM | 475 | N | ASP | A | 111 | 66.344 | 93.140 | 12.958 | 1.00 | 47.90 | A |
| ATOM | 476 | CA | ASP | A | 111 | 65.218 | 92.484 | 13.600 | 1.00 | 47.90 | A |
| ATOM | 477 | CB | ASP | A | 111 | 65.718 | 91.522 | 14.661 | 1.00 | 65.18 | A |
| ATOM | 478 | CG | ASP | A | 111 | 64.738 | 90.420 | 14.938 | 1.00 | 65.18 | A |
| ATOM | 479 | OD1 | ASP | A | 111 | 64.911 | 89.316 | 14.379 | 1.00 | 65.18 | A |
| ATOM | 480 | OD2 | ASP | A | 111 | 63.785 | 90.661 | 15.701 | 1.00 | 65.18 | A |
| ATOM | 481 | C | ASP | A | 111 | 64.221 | 93.438 | 14.241 | 1.00 | 47.90 | A |
| ATOM | 482 | O | ASP | A | 111 | 63.016 | 93.295 | 14.050 | 1.00 | 47.90 | A |
| ATOM | 483 | N | SER | A | 112 | 64.716 | 94.402 | 15.011 | 1.00 | 48.62 | A |
| ATOM | 484 | CA | SER | A | 112 | 63.841 | 95.361 | 15.679 | 1.00 | 48.62 | A |
| ATOM | 485 | CB | SER | A | 112 | 64.578 | 96.067 | 16.824 | 1.00 | 41.51 | A |
| ATOM | 486 | OG | SER | A | 112 | 65.442 | 97.079 | 16.329 | 1.00 | 41.51 | A |
| ATOM | 487 | C | SER | A | 112 | 63.301 | 96.419 | 14.728 | 1.00 | 48.62 | A |
| ATOM | 488 | O | SER | A | 112 | 62.207 | 96.937 | 14.930 | 1.00 | 48.62 | A |
| ATOM | 489 | N | GLY | A | 113 | 64.072 | 96.744 | 13.697 | 1.00 | 36.94 | A |
| ATOM | 490 | CA | GLY | A | 113 | 63.647 | 97.766 | 12.760 | 1.00 | 36.94 | A |
| ATOM | 491 | C | GLY | A | 113 | 63.984 | 99.148 | 13.302 | 1.00 | 36.94 | A |
| ATOM | 492 | O | GLY | A | 113 | 63.781 | 100.156 | 12.620 | 1.00 | 36.94 | A |
| ATOM | 493 | N | LEU | A | 114 | 64.520 | 99.197 | 14.521 | 1.00 | 42.02 | A |
| ATOM | 494 | CA | LEU | A | 114 | 64.871 | 100.463 | 15.159 | 1.00 | 42.02 | A |
| ATOM | 495 | CB | LEU | A | 114 | 64.736 | 100.334 | 16.679 | 1.00 | 31.99 | A |
| ATOM | 496 | CG | LEU | A | 114 | 63.376 | 99.778 | 17.130 | 1.00 | 31.99 | A |
| ATOM | 497 | CD1 | LEU | A | 114 | 63.406 | 99.447 | 18.612 | 1.00 | 31.99 | A |
| ATOM | 498 | CD2 | LEU | A | 114 | 62.277 | 100.788 | 16.795 | 1.00 | 31.99 | A |
| ATOM | 499 | C | LEU | A | 114 | 66.268 | 100.986 | 14.819 | 1.00 | 42.02 | A |
| ATOM | 500 | O | LEU | A | 114 | 67.215 | 100.220 | 14.624 | 1.00 | 42.02 | A |
| ATOM | 501 | N | TYR | A | 115 | 66.374 | 102.308 | 14.742 | 1.00 | 41.73 | A |
| ATOM | 502 | CA | TYR | A | 115 | 67.632 | 102.977 | 14.449 | 1.00 | 41.73 | A |
| ATOM | 503 | CB | TYR | A | 115 | 67.373 | 104.276 | 13.690 | 1.00 | 43.44 | A |
| ATOM | 504 | CG | TYR | A | 115 | 66.723 | 104.072 | 12.355 | 1.00 | 43.44 | A |
| ATOM | 505 | CD1 | TYR | A | 115 | 67.485 | 103.750 | 11.234 | 1.00 | 43.44 | A |
| ATOM | 506 | CE1 | TYR | A | 115 | 66.886 | 103.512 | 10.007 | 1.00 | 43.44 | A |
| ATOM | 507 | CD2 | TYR | A | 115 | 65.336 | 104.156 | 12.214 | 1.00 | 43.44 | A |
| ATOM | 508 | CE2 | TYR | A | 115 | 64.723 | 103.919 | 10.991 | 1.00 | 43.44 | A |
| ATOM | 509 | CZ | TYR | A | 115 | 65.505 | 103.596 | 9.893 | 1.00 | 43.44 | A |
| ATOM | 510 | OH | TYR | A | 115 | 64.915 | 103.333 | 8.680 | 1.00 | 43.44 | A |
| ATOM | 511 | C | TYR | A | 115 | 68.350 | 103.312 | 15.748 | 1.00 | 41.73 | A |
| ATOM | 512 | O | TYR | A | 115 | 67.719 | 103.670 | 16.747 | 1.00 | 41.73 | A |
| ATOM | 513 | N | LEU | A | 116 | 69.669 | 103.183 | 15.739 | 1.00 | 33.73 | A |
| ATOM | 514 | CA | LEU | A | 116 | 70.441 | 103.525 | 16.916 | 1.00 | 33.73 | A |
| ATOM | 515 | CB | LEU | A | 116 | 71.898 | 103.106 | 16.759 | 1.00 | 33.45 | A |
| ATOM | 516 | CG | LEU | A | 116 | 72.749 | 103.390 | 17.999 | 1.00 | 33.45 | A |
| ATOM | 517 | CD1 | LEU | A | 116 | 72.195 | 102.589 | 19.172 | 1.00 | 33.45 | A |
| ATOM | 518 | CD2 | LEU | A | 116 | 74.211 | 103.027 | 17.743 | 1.00 | 33.45 | A |
| ATOM | 519 | C | LEU | A | 116 | 70.374 | 105.045 | 17.034 | 1.00 | 33.73 | A |
| ATOM | 520 | O | LEU | A | 116 | 70.591 | 105.774 | 16.053 | 1.00 | 33.73 | A |
| ATOM | 521 | N | GLY | A | 117 | 70.048 | 105.522 | 18.232 | 1.00 | 33.61 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 522 | CA | GLY | A | 117 | 69.981 | 106.953 | 18.455 | 1.00 | 33.61 | A |
| ATOM | 523 | C | GLY | A | 117 | 70.658 | 107.316 | 19.759 | 1.00 | 33.61 | A |
| ATOM | 524 | O | GLY | A | 117 | 70.848 | 106.470 | 20.635 | 1.00 | 33.61 | A |
| ATOM | 525 | N | MET | A | 118 | 71.065 | 108.570 | 19.879 | 1.00 | 30.89 | A |
| ATOM | 526 | CA | MET | A | 118 | 71.665 | 109.040 | 21.119 | 1.00 | 30.89 | A |
| ATOM | 527 | CB | MET | A | 118 | 73.166 | 109.277 | 20.977 | 1.00 | 36.59 | A |
| ATOM | 528 | CG | MET | A | 118 | 73.830 | 109.497 | 22.329 | 1.00 | 36.59 | A |
| ATOM | 529 | SD | MET | A | 118 | 75.518 | 110.087 | 22.258 | 1.00 | 36.59 | A |
| ATOM | 530 | CE | MET | A | 118 | 76.443 | 108.534 | 22.088 | 1.00 | 36.59 | A |
| ATOM | 531 | C | MET | A | 118 | 70.967 | 110.348 | 21.441 | 1.00 | 30.89 | A |
| ATOM | 532 | O | MET | A | 118 | 71.003 | 111.288 | 20.644 | 1.00 | 30.89 | A |
| ATOM | 533 | N | ASN | A | 119 | 70.308 | 110.413 | 22.590 | 1.00 | 44.08 | A |
| ATOM | 534 | CA | ASN | A | 119 | 69.614 | 111.645 | 22.944 | 1.00 | 44.08 | A |
| ATOM | 535 | CB | ASN | A | 119 | 68.437 | 111.354 | 23.881 | 1.00 | 34.21 | A |
| ATOM | 536 | CG | ASN | A | 119 | 68.874 | 110.847 | 25.233 | 1.00 | 34.21 | A |
| ATOM | 537 | OD1 | ASN | A | 119 | 70.030 | 111.020 | 25.642 | 1.00 | 34.21 | A |
| ATOM | 538 | ND2 | ASN | A | 119 | 67.947 | 110.229 | 25.954 | 1.00 | 34.21 | A |
| ATOM | 539 | C | ASN | A | 119 | 70.566 | 112.677 | 23.572 | 1.00 | 44.08 | A |
| ATOM | 540 | O | ASN | A | 119 | 71.746 | 112.398 | 23.800 | 1.00 | 44.08 | A |
| ATOM | 541 | N | GLU | A | 120 | 70.037 | 113.867 | 23.838 | 1.00 | 49.84 | A |
| ATOM | 542 | CA | GLU | A | 120 | 70.804 | 114.965 | 24.412 | 1.00 | 49.84 | A |
| ATOM | 543 | CB | GLU | A | 120 | 69.861 | 116.142 | 24.648 | 1.00 | 71.86 | A |
| ATOM | 544 | CG | GLU | A | 120 | 70.538 | 117.446 | 24.987 | 1.00 | 71.86 | A |
| ATOM | 545 | CD | GLU | A | 120 | 69.752 | 118.639 | 24.473 | 1.00 | 71.86 | A |
| ATOM | 546 | OE1 | GLU | A | 120 | 68.519 | 118.677 | 24.688 | 1.00 | 71.86 | A |
| ATOM | 547 | OE2 | GLU | A | 120 | 70.369 | 119.535 | 23.856 | 1.00 | 71.86 | A |
| ATOM | 548 | C | GLU | A | 120 | 71.580 | 114.618 | 25.695 | 1.00 | 49.84 | A |
| ATOM | 549 | O | GLU | A | 120 | 72.625 | 115.204 | 25.964 | 1.00 | 49.84 | A |
| ATOM | 550 | N | LYS | A | 121 | 71.081 | 113.670 | 26.483 | 1.00 | 46.92 | A |
| ATOM | 551 | CA | LYS | A | 121 | 71.771 | 113.267 | 27.707 | 1.00 | 46.92 | A |
| ATOM | 552 | CB | LYS | A | 121 | 70.806 | 112.604 | 28.692 | 1.00 | 54.84 | A |
| ATOM | 553 | CG | LYS | A | 121 | 69.660 | 113.476 | 29.163 | 1.00 | 54.84 | A |
| ATOM | 554 | CD | LYS | A | 121 | 68.682 | 112.679 | 30.023 | 1.00 | 54.84 | A |
| ATOM | 555 | CE | LYS | A | 121 | 67.455 | 113.512 | 30.366 | 1.00 | 54.84 | A |
| ATOM | 556 | NZ | LYS | A | 121 | 66.380 | 112.716 | 31.028 | 1.00 | 54.84 | A |
| ATOM | 557 | C | LYS | A | 121 | 72.875 | 112.268 | 27.378 | 1.00 | 46.92 | A |
| ATOM | 558 | O | LYS | A | 121 | 73.559 | 111.775 | 28.275 | 1.00 | 46.92 | A |
| ATOM | 559 | N | GLY | A | 122 | 73.026 | 111.953 | 26.093 | 1.00 | 43.12 | A |
| ATOM | 560 | CA | GLY | A | 122 | 74.044 | 111.008 | 25.670 | 1.00 | 43.12 | A |
| ATOM | 561 | C | GLY | A | 122 | 73.627 | 109.557 | 25.824 | 1.00 | 43.12 | A |
| ATOM | 562 | O | GLY | A | 122 | 74.454 | 108.649 | 25.737 | 1.00 | 43.12 | A |
| ATOM | 563 | N | GLU | A | 123 | 72.344 | 109.318 | 26.051 | 1.00 | 41.94 | A |
| ATOM | 564 | CA | GLU | A | 123 | 71.888 | 107.946 | 26.214 | 1.00 | 41.94 | A |
| ATOM | 565 | CB | GLU | A | 123 | 70.700 | 107.887 | 27.178 | 1.00 | 66.72 | A |
| ATOM | 566 | CG | GLU | A | 123 | 71.046 | 108.284 | 28.605 | 1.00 | 66.72 | A |
| ATOM | 567 | CD | GLU | A | 123 | 69.906 | 108.036 | 29.578 | 1.00 | 66.72 | A |
| ATOM | 568 | OE1 | GLU | A | 123 | 68.828 | 108.658 | 29.416 | 1.00 | 66.72 | A |
| ATOM | 569 | OE2 | GLU | A | 123 | 70.098 | 107.213 | 30.501 | 1.00 | 66.72 | A |
| ATOM | 570 | C | GLU | A | 123 | 71.516 | 107.306 | 24.881 | 1.00 | 41.94 | A |
| ATOM | 571 | O | GLU | A | 123 | 70.896 | 107.940 | 24.018 | 1.00 | 41.94 | A |
| ATOM | 572 | N | LEU | A | 124 | 71.926 | 106.050 | 24.719 | 1.00 | 42.10 | A |
| ATOM | 573 | CA | LEU | A | 124 | 71.636 | 105.294 | 23.511 | 1.00 | 42.10 | A |
| ATOM | 574 | CB | LEU | A | 124 | 72.618 | 104.126 | 23.359 | 1.00 | 31.10 | A |
| ATOM | 575 | CG | LEU | A | 124 | 74.101 | 104.456 | 23.275 | 1.00 | 31.10 | A |
| ATOM | 576 | CD1 | LEU | A | 124 | 74.905 | 103.164 | 23.248 | 1.00 | 31.10 | A |
| ATOM | 577 | CD2 | LEU | A | 124 | 74.357 | 105.307 | 22.042 | 1.00 | 31.10 | A |
| ATOM | 578 | C | LEU | A | 124 | 70.227 | 104.729 | 23.620 | 1.00 | 42.10 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 579 | O | LEU | A | 124 | 69.794 | 104.328 | 24.701 | 1.00 | 42.10 | A |
| ATOM | 580 | N | TYR | A | 125 | 69.521 | 104.688 | 22.499 | 1.00 | 35.83 | A |
| ATOM | 581 | CA | TYR | A | 125 | 68.172 | 104.144 | 22.483 | 1.00 | 35.83 | A |
| ATOM | 582 | CB | TYR | A | 125 | 67.162 | 105.191 | 22.969 | 1.00 | 33.16 | A |
| ATOM | 583 | CG | TYR | A | 125 | 66.998 | 106.361 | 22.027 | 1.00 | 33.16 | A |
| ATOM | 584 | CD1 | TYR | A | 125 | 67.900 | 107.429 | 22.035 | 1.00 | 33.16 | A |
| ATOM | 585 | CE1 | TYR | A | 125 | 67.761 | 108.503 | 21.151 | 1.00 | 33.16 | A |
| ATOM | 586 | CD2 | TYR | A | 125 | 65.951 | 106.392 | 21.111 | 1.00 | 33.16 | A |
| ATOM | 587 | CE2 | TYR | A | 125 | 65.798 | 107.451 | 20.227 | 1.00 | 33.16 | A |
| ATOM | 588 | CZ | TYR | A | 125 | 66.705 | 108.506 | 20.251 | 1.00 | 33.16 | A |
| ATOM | 589 | OH | TYR | A | 125 | 66.521 | 109.560 | 19.378 | 1.00 | 33.16 | A |
| ATOM | 590 | C | TYR | A | 125 | 67.827 | 103.726 | 21.063 | 1.00 | 35.83 | A |
| ATOM | 591 | O | TYR | A | 125 | 68.450 | 104.188 | 20.110 | 1.00 | 35.83 | A |
| ATOM | 592 | N | GLY | A | 126 | 66.836 | 102.851 | 20.928 | 1.00 | 38.80 | A |
| ATOM | 593 | CA | GLY | A | 126 | 66.420 | 102.405 | 19.615 | 1.00 | 38.80 | A |
| ATOM | 594 | C | GLY | A | 126 | 65.299 | 103.311 | 19.162 | 1.00 | 38.80 | A |
| ATOM | 595 | O | GLY | A | 126 | 64.254 | 103.360 | 19.809 | 1.00 | 38.80 | A |
| ATOM | 596 | N | SER | A | 127 | 65.512 | 104.023 | 18.055 | 1.00 | 42.59 | A |
| ATOM | 597 | CA | SER | A | 127 | 64.527 | 104.960 | 17.525 | 1.00 | 42.59 | A |
| ATOM | 598 | CB | SER | A | 127 | 65.234 | 106.231 | 17.054 | 1.00 | 44.81 | A |
| ATOM | 599 | OG | SER | A | 127 | 64.333 | 107.119 | 16.413 | 1.00 | 44.81 | A |
| ATOM | 600 | C | SER | A | 127 | 63.653 | 104.438 | 16.388 | 1.00 | 42.59 | A |
| ATOM | 601 | O | SER | A | 127 | 64.138 | 103.859 | 15.415 | 1.00 | 42.59 | A |
| ATOM | 602 | N | GLU | A | 128 | 62.353 | 104.681 | 16.508 | 1.00 | 48.10 | A |
| ATOM | 603 | CA | GLU | A | 128 | 61.400 | 104.268 | 15.498 | 1.00 | 48.10 | A |
| ATOM | 604 | CB | GLU | A | 128 | 59.991 | 104.662 | 15.924 | 1.00 | 100.00 | A |
| ATOM | 605 | CG | GLU | A | 128 | 58.916 | 104.165 | 14.989 | 1.00 | 100.00 | A |
| ATOM | 606 | CD | GLU | A | 128 | 57.575 | 104.803 | 15.267 | 1.00 | 100.00 | A |
| ATOM | 607 | OE1 | GLU | A | 128 | 57.432 | 106.021 | 15.012 | 1.00 | 100.00 | A |
| ATOM | 608 | OE2 | GLU | A | 128 | 56.669 | 104.089 | 15.744 | 1.00 | 100.00 | A |
| ATOM | 609 | C | GLU | A | 128 | 61.729 | 104.924 | 14.155 | 1.00 | 48.10 | A |
| ATOM | 610 | O | GLU | A | 128 | 61.665 | 104.280 | 13.110 | 1.00 | 48.10 | A |
| ATOM | 611 | N | LYS | A | 129 | 62.094 | 106.203 | 14.186 | 1.00 | 46.49 | A |
| ATOM | 612 | CA | LYS | A | 129 | 62.410 | 106.925 | 12.961 | 1.00 | 46.49 | A |
| ATOM | 613 | CB | LYS | A | 129 | 61.486 | 108.135 | 12.824 | 1.00 | 97.04 | A |
| ATOM | 614 | CG | LYS | A | 129 | 60.019 | 107.755 | 12.789 | 1.00 | 97.04 | A |
| ATOM | 615 | CD | LYS | A | 129 | 59.136 | 108.939 | 12.463 | 1.00 | 97.04 | A |
| ATOM | 616 | CE | LYS | A | 129 | 57.675 | 108.521 | 12.392 | 1.00 | 97.04 | A |
| ATOM | 617 | NZ | LYS | A | 129 | 56.788 | 109.657 | 12.008 | 1.00 | 97.04 | A |
| ATOM | 618 | C | LYS | A | 129 | 63.864 | 107.376 | 12.853 | 1.00 | 46.49 | A |
| ATOM | 619 | O | LYS | A | 129 | 64.523 | 107.669 | 13.853 | 1.00 | 46.49 | A |
| ATOM | 620 | N | LEU | A | 130 | 64.367 | 107.422 | 11.626 | 1.00 | 48.47 | A |
| ATOM | 621 | CA | LEU | A | 130 | 65.736 | 107.851 | 11.409 | 1.00 | 48.47 | A |
| ATOM | 622 | CB | LEU | A | 130 | 66.228 | 107.398 | 10.033 | 1.00 | 48.95 | A |
| ATOM | 623 | CG | LEU | A | 130 | 67.754 | 107.322 | 9.880 | 1.00 | 48.95 | A |
| ATOM | 624 | CD1 | LEU | A | 130 | 68.079 | 106.741 | 8.507 | 1.00 | 48.95 | A |
| ATOM | 625 | CD2 | LEU | A | 130 | 68.399 | 108.695 | 10.054 | 1.00 | 48.95 | A |
| ATOM | 626 | C | LEU | A | 130 | 65.765 | 109.378 | 11.525 | 1.00 | 48.47 | A |
| ATOM | 627 | O | LEU | A | 130 | 65.411 | 110.101 | 10.593 | 1.00 | 48.47 | A |
| ATOM | 628 | N | THR | A | 131 | 66.194 | 109.858 | 12.686 | 1.00 | 40.24 | A |
| ATOM | 629 | CA | THR | A | 131 | 66.245 | 111.285 | 12.946 | 1.00 | 40.24 | A |
| ATOM | 630 | CB | THR | A | 131 | 65.458 | 111.627 | 14.235 | 1.00 | 40.73 | A |
| ATOM | 631 | OG1 | THR | A | 131 | 66.038 | 110.940 | 15.358 | 1.00 | 40.73 | A |
| ATOM | 632 | CG2 | THR | A | 131 | 64.000 | 111.194 | 14.090 | 1.00 | 40.73 | A |
| ATOM | 633 | C | THR | A | 131 | 67.669 | 111.792 | 13.085 | 1.00 | 40.24 | A |
| ATOM | 634 | O | THR | A | 131 | 68.628 | 111.042 | 12.916 | 1.00 | 40.24 | A |
| ATOM | 635 | N | GLN | A | 132 | 67.792 | 113.079 | 13.390 | 1.00 | 50.95 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 636 | CA | GLN | A | 132 | 69.093 | 113.700 | 13.556 | 1.00 | 50.95 | A |
| ATOM | 637 | CB | GLN | A | 132 | 68.932 | 115.198 | 13.808 | 1.00 | 96.26 | A |
| ATOM | 638 | CG | GLN | A | 132 | 68.197 | 115.916 | 12.690 | 1.00 | 96.26 | A |
| ATOM | 639 | CD | GLN | A | 132 | 68.895 | 115.780 | 11.344 | 1.00 | 96.26 | A |
| ATOM | 640 | OE1 | GLN | A | 132 | 69.184 | 114.673 | 10.888 | 1.00 | 96.26 | A |
| ATOM | 641 | NE2 | GLN | A | 132 | 69.162 | 116.910 | 10.698 | 1.00 | 96.26 | A |
| ATOM | 642 | C | GLN | A | 132 | 69.859 | 113.046 | 14.694 | 1.00 | 50.95 | A |
| ATOM | 643 | O | GLN | A | 132 | 71.087 | 113.018 | 14.676 | 1.00 | 50.95 | A |
| ATOM | 644 | N | GLU | A | 133 | 69.142 | 112.509 | 15.679 | 1.00 | 38.78 | A |
| ATOM | 645 | CA | GLU | A | 133 | 69.802 | 111.845 | 16.802 | 1.00 | 38.78 | A |
| ATOM | 646 | CB | GLU | A | 133 | 68.849 | 111.697 | 17.995 | 1.00 | 42.92 | A |
| ATOM | 647 | CG | GLU | A | 133 | 68.371 | 112.986 | 18.628 | 1.00 | 42.92 | A |
| ATOM | 648 | CD | GLU | A | 133 | 67.837 | 112.767 | 20.042 | 1.00 | 42.92 | A |
| ATOM | 649 | OE1 | GLU | A | 133 | 67.334 | 111.662 | 20.330 | 1.00 | 42.92 | A |
| ATOM | 650 | OE2 | GLU | A | 133 | 67.915 | 113.699 | 20.870 | 1.00 | 42.92 | A |
| ATOM | 651 | C | GLU | A | 133 | 70.285 | 110.447 | 16.392 | 1.00 | 38.78 | A |
| ATOM | 652 | O | GLU | A | 133 | 70.805 | 109.693 | 17.211 | 1.00 | 38.78 | A |
| ATOM | 653 | N | CYS | A | 134 | 70.110 | 110.112 | 15.122 | 1.00 | 37.59 | A |
| ATOM | 654 | CA | CYS | A | 134 | 70.486 | 108.803 | 14.625 | 1.00 | 37.59 | A |
| ATOM | 655 | CB | CYS | A | 134 | 69.264 | 108.133 | 14.011 | 1.00 | 44.56 | A |
| ATOM | 656 | SG | CYS | A | 134 | 67.933 | 107.967 | 15.181 | 1.00 | 44.56 | A |
| ATOM | 657 | C | CYS | A | 134 | 71.614 | 108.828 | 13.616 | 1.00 | 37.59 | A |
| ATOM | 658 | O | CYS | A | 134 | 71.873 | 107.834 | 12.944 | 1.00 | 37.59 | A |
| ATOM | 659 | N | VAL | A | 135 | 72.275 | 109.967 | 13.502 | 1.00 | 43.83 | A |
| ATOM | 660 | CA | VAL | A | 135 | 73.380 | 110.092 | 12.575 | 1.00 | 43.83 | A |
| ATOM | 661 | CB | VAL | A | 135 | 73.245 | 111.373 | 11.719 | 1.00 | 31.92 | A |
| ATOM | 662 | CG1 | VAL | A | 135 | 74.511 | 111.605 | 10.910 | 1.00 | 31.92 | A |
| ATOM | 663 | CG2 | VAL | A | 135 | 72.040 | 111.239 | 10.781 | 1.00 | 31.92 | A |
| ATOM | 664 | C | VAL | A | 135 | 74.657 | 110.135 | 13.392 | 1.00 | 43.83 | A |
| ATOM | 665 | O | VAL | A | 135 | 74.797 | 110.964 | 14.295 | 1.00 | 43.83 | A |
| ATOM | 666 | N | PHE | A | 136 | 75.580 | 109.225 | 13.094 | 1.00 | 36.43 | A |
| ATOM | 667 | CA | PHE | A | 136 | 76.834 | 109.183 | 13.823 | 1.00 | 36.43 | A |
| ATOM | 668 | CB | PHE | A | 136 | 76.995 | 107.856 | 14.550 | 1.00 | 27.81 | A |
| ATOM | 669 | CG | PHE | A | 136 | 75.917 | 107.588 | 15.537 | 1.00 | 27.81 | A |
| ATOM | 670 | CD1 | PHE | A | 136 | 74.694 | 107.063 | 15.123 | 1.00 | 27.81 | A |
| ATOM | 671 | CD2 | PHE | A | 136 | 76.096 | 107.902 | 16.881 | 1.00 | 27.81 | A |
| ATOM | 672 | CE1 | PHE | A | 136 | 73.654 | 106.852 | 16.034 | 1.00 | 27.81 | A |
| ATOM | 673 | CE2 | PHE | A | 136 | 75.066 | 107.697 | 17.803 | 1.00 | 27.81 | A |
| ATOM | 674 | CZ | PHE | A | 136 | 73.838 | 107.170 | 17.378 | 1.00 | 27.81 | A |
| ATOM | 675 | C | PHE | A | 136 | 78.034 | 109.395 | 12.948 | 1.00 | 36.43 | A |
| ATOM | 676 | O | PHE | A | 136 | 78.054 | 108.995 | 11.785 | 1.00 | 36.43 | A |
| ATOM | 677 | N | ARG | A | 137 | 79.035 | 110.046 | 13.526 | 1.00 | 37.38 | A |
| ATOM | 678 | CA | ARG | A | 137 | 80.279 | 110.300 | 12.836 | 1.00 | 37.38 | A |
| ATOM | 679 | CB | ARG | A | 137 | 81.011 | 111.467 | 13.477 | 1.00 | 41.52 | A |
| ATOM | 680 | CG | ARG | A | 137 | 80.228 | 112.737 | 13.464 | 1.00 | 41.52 | A |
| ATOM | 681 | CD | ARG | A | 137 | 81.045 | 113.863 | 14.017 | 1.00 | 41.52 | A |
| ATOM | 682 | NE | ARG | A | 137 | 80.368 | 115.130 | 13.782 | 1.00 | 41.52 | A |
| ATOM | 683 | CZ | ARG | A | 137 | 80.944 | 116.319 | 13.916 | 1.00 | 41.52 | A |
| ATOM | 684 | NH1 | ARG | A | 137 | 82.217 | 116.406 | 14.286 | 1.00 | 41.52 | A |
| ATOM | 685 | NH2 | ARG | A | 137 | 80.246 | 117.416 | 13.673 | 1.00 | 41.52 | A |
| ATOM | 686 | C | ARG | A | 137 | 81.133 | 109.053 | 12.965 | 1.00 | 37.38 | A |
| ATOM | 687 | O | ARG | A | 137 | 81.595 | 108.704 | 14.066 | 1.00 | 37.38 | A |
| ATOM | 688 | N | GLU | A | 138 | 81.327 | 108.368 | 11.846 | 1.00 | 39.12 | A |
| ATOM | 689 | CA | GLU | A | 138 | 82.143 | 107.167 | 11.834 | 1.00 | 39.12 | A |
| ATOM | 690 | CB | GLU | A | 138 | 81.585 | 106.167 | 10.830 | 1.00 | 38.56 | A |
| ATOM | 691 | CG | GLU | A | 138 | 82.370 | 104.863 | 10.719 | 1.00 | 38.56 | A |
| ATOM | 692 | CD | GLU | A | 138 | 81.719 | 103.908 | 9.738 | 1.00 | 38.56 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 693 | OE1 | GLU | A | 138 | 81.670 | 104.249 | 8.542 | 1.00 | 38.56 | A |
| ATOM | 694 | OE2 | GLU | A | 138 | 81.237 | 102.836 | 10.158 | 1.00 | 38.56 | A |
| ATOM | 695 | C | GLU | A | 138 | 83.560 | 107.567 | 11.451 | 1.00 | 39.12 | A |
| ATOM | 696 | O | GLU | A | 138 | 83.794 | 108.086 | 10.365 | 1.00 | 39.12 | A |
| ATOM | 697 | N | GLN | A | 139 | 84.499 | 107.334 | 12.357 | 1.00 | 40.20 | A |
| ATOM | 698 | CA | GLN | A | 139 | 85.893 | 107.671 | 12.113 | 1.00 | 40.20 | A |
| ATOM | 699 | CB | GLN | A | 139 | 86.253 | 108.971 | 12.816 | 1.00 | 41.33 | A |
| ATOM | 700 | CG | GLN | A | 139 | 85.593 | 110.190 | 12.243 | 1.00 | 41.33 | A |
| ATOM | 701 | CD | GLN | A | 139 | 85.751 | 111.386 | 13.150 | 1.00 | 41.33 | A |
| ATOM | 702 | OE1 | GLN | A | 139 | 86.621 | 111.404 | 14.031 | 1.00 | 41.33 | A |
| ATOM | 703 | NE2 | GLN | A | 139 | 84.920 | 112.399 | 12.940 | 1.00 | 41.33 | A |
| ATOM | 704 | C | GLN | A | 139 | 86.839 | 106.577 | 12.585 | 1.00 | 40.20 | A |
| ATOM | 705 | O | GLN | A | 139 | 86.724 | 106.082 | 13.706 | 1.00 | 40.20 | A |
| ATOM | 706 | N | PHE | A | 140 | 87.777 | 106.217 | 11.712 | 1.00 | 36.98 | A |
| ATOM | 707 | CA | PHE | A | 140 | 88.777 | 105.200 | 11.994 | 1.00 | 36.98 | A |
| ATOM | 708 | CB | PHE | A | 140 | 89.817 | 105.178 | 10.865 | 1.00 | 40.09 | A |
| ATOM | 709 | CG | PHE | A | 140 | 90.886 | 104.134 | 11.041 | 1.00 | 40.09 | A |
| ATOM | 710 | CD1 | PHE | A | 140 | 91.951 | 104.347 | 11.914 | 1.00 | 40.09 | A |
| ATOM | 711 | CD2 | PHE | A | 140 | 90.809 | 102.919 | 10.355 | 1.00 | 40.09 | A |
| ATOM | 712 | CE1 | PHE | A | 140 | 92.924 | 103.364 | 12.104 | 1.00 | 40.09 | A |
| ATOM | 713 | CE2 | PHE | A | 140 | 91.773 | 101.930 | 10.537 | 1.00 | 40.09 | A |
| ATOM | 714 | CZ | PHE | A | 140 | 92.834 | 102.150 | 11.412 | 1.00 | 40.09 | A |
| ATOM | 715 | C | PHE | A | 140 | 89.465 | 105.481 | 13.325 | 1.00 | 36.98 | A |
| ATOM | 716 | O | PHE | A | 140 | 89.768 | 106.626 | 13.644 | 1.00 | 36.98 | A |
| ATOM | 717 | N | GLU | A | 141 | 89.713 | 104.432 | 14.096 | 1.00 | 41.49 | A |
| ATOM | 718 | CA | GLU | A | 141 | 90.373 | 104.574 | 15.382 | 1.00 | 41.49 | A |
| ATOM | 719 | CB | GLU | A | 141 | 89.423 | 104.141 | 16.501 | 1.00 | 39.52 | A |
| ATOM | 720 | CG | GLU | A | 141 | 90.011 | 104.126 | 17.911 | 1.00 | 39.52 | A |
| ATOM | 721 | CD | GLU | A | 141 | 90.582 | 105.469 | 18.368 | 1.00 | 39.52 | A |
| ATOM | 722 | OE1 | GLU | A | 141 | 90.166 | 106.531 | 17.844 | 1.00 | 39.52 | A |
| ATOM | 723 | OE2 | GLU | A | 141 | 91.446 | 105.456 | 19.274 | 1.00 | 39.52 | A |
| ATOM | 724 | C | GLU | A | 141 | 91.642 | 103.727 | 15.392 | 1.00 | 41.49 | A |
| ATOM | 725 | O | GLU | A | 141 | 92.739 | 104.239 | 15.590 | 1.00 | 41.49 | A |
| ATOM | 726 | N | GLU | A | 142 | 91.492 | 102.432 | 15.157 | 1.00 | 46.79 | A |
| ATOM | 727 | CA | GLU | A | 142 | 92.636 | 101.536 | 15.152 | 1.00 | 46.79 | A |
| ATOM | 728 | CB | GLU | A | 142 | 93.272 | 101.483 | 16.546 | 1.00 | 60.39 | A |
| ATOM | 729 | CG | GLU | A | 142 | 92.300 | 101.193 | 17.701 | 1.00 | 60.39 | A |
| ATOM | 730 | CD | GLU | A | 142 | 92.138 | 99.703 | 18.029 | 1.00 | 60.39 | A |
| ATOM | 731 | OE1 | GLU | A | 142 | 92.916 | 98.880 | 17.497 | 1.00 | 60.39 | A |
| ATOM | 732 | OE2 | GLU | A | 142 | 91.236 | 99.361 | 18.835 | 1.00 | 60.39 | A |
| ATOM | 733 | C | GLU | A | 142 | 92.241 | 100.139 | 14.717 | 1.00 | 46.79 | A |
| ATOM | 734 | O | GLU | A | 142 | 91.230 | 99.607 | 15.167 | 1.00 | 46.79 | A |
| ATOM | 735 | N | ASN | A | 143 | 93.040 | 99.558 | 13.827 | 1.00 | 37.61 | A |
| ATOM | 736 | CA | ASN | A | 143 | 92.800 | 98.205 | 13.336 | 1.00 | 37.61 | A |
| ATOM | 737 | CB | ASN | A | 143 | 93.074 | 97.208 | 14.448 | 1.00 | 36.68 | A |
| ATOM | 738 | CG | ASN | A | 143 | 94.527 | 97.204 | 14.856 | 1.00 | 36.68 | A |
| ATOM | 739 | OD1 | ASN | A | 143 | 95.405 | 96.922 | 14.036 | 1.00 | 36.68 | A |
| ATOM | 740 | ND2 | ASN | A | 143 | 94.796 | 97.526 | 16.115 | 1.00 | 36.68 | A |
| ATOM | 741 | C | ASN | A | 143 | 91.406 | 97.995 | 12.790 | 1.00 | 37.61 | A |
| ATOM | 742 | O | ASN | A | 143 | 90.827 | 96.921 | 12.940 | 1.00 | 37.61 | A |
| ATOM | 743 | N | TRP | A | 144 | 90.881 | 99.037 | 12.156 | 1.00 | 33.61 | A |
| ATOM | 744 | CA | TRP | A | 144 | 89.558 | 99.024 | 11.555 | 1.00 | 33.61 | A |
| ATOM | 745 | CB | TRP | A | 144 | 89.422 | 97.825 | 10.611 | 1.00 | 35.86 | A |
| ATOM | 746 | CG | TRP | A | 144 | 90.430 | 97.988 | 9.550 | 1.00 | 35.86 | A |
| ATOM | 747 | CD2 | TRP | A | 144 | 90.500 | 99.070 | 8.619 | 1.00 | 35.86 | A |
| ATOM | 748 | CE2 | TRP | A | 144 | 91.741 | 98.969 | 7.957 | 1.00 | 35.86 | A |
| ATOM | 749 | CE3 | TRP | A | 144 | 89.637 | 100.125 | 8.287 | 1.00 | 35.86 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 750 | CD1 | TRP | A | 144 | 91.595 | 97.283 | 9.406 | 1.00 | 35.86 | A |
| ATOM | 751 | NE1 | TRP | A | 144 | 92.384 | 97.868 | 8.458 | 1.00 | 35.86 | A |
| ATOM | 752 | CZ2 | TRP | A | 144 | 92.146 | 99.889 | 6.976 | 1.00 | 35.86 | A |
| ATOM | 753 | CZ3 | TRP | A | 144 | 90.034 | 101.039 | 7.315 | 1.00 | 35.86 | A |
| ATOM | 754 | CH2 | TRP | A | 144 | 91.280 | 100.914 | 6.671 | 1.00 | 35.86 | A |
| ATOM | 755 | C | TRP | A | 144 | 88.401 | 99.132 | 12.529 | 1.00 | 33.61 | A |
| ATOM | 756 | O | TRP | A | 144 | 87.238 | 98.996 | 12.149 | 1.00 | 33.61 | A |
| ATOM | 757 | N | TYR | A | 145 | 88.729 | 99.354 | 13.795 | 1.00 | 36.97 | A |
| ATOM | 758 | CA | TYR | A | 145 | 87.692 | 99.613 | 14.774 | 1.00 | 36.97 | A |
| ATOM | 759 | CB | TYR | A | 145 | 88.187 | 99.470 | 16.202 | 1.00 | 39.02 | A |
| ATOM | 760 | CG | TYR | A | 145 | 88.164 | 98.077 | 16.739 | 1.00 | 39.02 | A |
| ATOM | 761 | CD1 | TYR | A | 145 | 89.246 | 97.222 | 16.559 | 1.00 | 39.02 | A |
| ATOM | 762 | CE1 | TYR | A | 145 | 89.242 | 95.951 | 17.104 | 1.00 | 39.02 | A |
| ATOM | 763 | CD2 | TYR | A | 145 | 87.072 | 97.622 | 17.468 | 1.00 | 39.02 | A |
| ATOM | 764 | CE2 | TYR | A | 145 | 87.055 | 96.355 | 18.013 | 1.00 | 39.02 | A |
| ATOM | 765 | CZ | TYR | A | 145 | 88.143 | 95.526 | 17.834 | 1.00 | 39.02 | A |
| ATOM | 766 | OH | TYR | A | 145 | 88.139 | 94.293 | 18.424 | 1.00 | 39.02 | A |
| ATOM | 767 | C | TYR | A | 145 | 87.448 | 101.100 | 14.543 | 1.00 | 36.97 | A |
| ATOM | 768 | O | TYR | A | 145 | 88.385 | 101.850 | 14.266 | 1.00 | 36.97 | A |
| ATOM | 769 | N | ASN | A | 146 | 86.203 | 101.530 | 14.623 | 1.00 | 32.33 | A |
| ATOM | 770 | CA | ASN | A | 146 | 85.924 | 102.941 | 14.463 | 1.00 | 32.33 | A |
| ATOM | 771 | CB | ASN | A | 146 | 84.869 | 103.184 | 13.381 | 1.00 | 40.35 | A |
| ATOM | 772 | CG | ASN | A | 146 | 85.298 | 102.693 | 12.022 | 1.00 | 40.35 | A |
| ATOM | 773 | OD1 | ASN | A | 146 | 86.365 | 103.058 | 11.528 | 1.00 | 40.35 | A |
| ATOM | 774 | ND2 | ASN | A | 146 | 84.464 | 101.870 | 11.400 | 1.00 | 40.35 | A |
| ATOM | 775 | C | ASN | A | 146 | 85.372 | 103.429 | 15.786 | 1.00 | 32.33 | A |
| ATOM | 776 | O | ASN | A | 146 | 85.229 | 102.674 | 16.753 | 1.00 | 32.33 | A |
| ATOM | 777 | N | THR | A | 147 | 85.095 | 104.720 | 15.825 | 1.00 | 30.02 | A |
| ATOM | 778 | CA | THR | A | 147 | 84.465 | 105.330 | 16.975 | 1.00 | 30.02 | A |
| ATOM | 779 | CB | THR | A | 147 | 85.303 | 106.456 | 17.602 | 1.00 | 33.62 | A |
| ATOM | 780 | OG1 | THR | A | 147 | 85.681 | 107.402 | 16.593 | 1.00 | 33.62 | A |
| ATOM | 781 | CG2 | THR | A | 147 | 86.530 | 105.882 | 18.284 | 1.00 | 33.62 | A |
| ATOM | 782 | C | THR | A | 147 | 83.251 | 105.921 | 16.301 | 1.00 | 30.02 | A |
| ATOM | 783 | O | THR | A | 147 | 83.298 | 106.263 | 15.114 | 1.00 | 30.02 | A |
| ATOM | 784 | N | TYR | A | 148 | 82.153 | 105.993 | 17.038 | 1.00 | 41.03 | A |
| ATOM | 785 | CA | TYR | A | 148 | 80.929 | 106.559 | 16.503 | 1.00 | 41.03 | A |
| ATOM | 786 | CB | TYR | A | 148 | 79.875 | 105.461 | 16.317 | 1.00 | 34.61 | A |
| ATOM | 787 | CG | TYR | A | 148 | 80.270 | 104.413 | 15.295 | 1.00 | 34.61 | A |
| ATOM | 788 | CD1 | TYR | A | 148 | 81.178 | 103.405 | 15.617 | 1.00 | 34.61 | A |
| ATOM | 789 | CE1 | TYR | A | 148 | 81.605 | 102.480 | 14.659 | 1.00 | 34.61 | A |
| ATOM | 790 | CD2 | TYR | A | 148 | 79.787 | 104.470 | 13.989 | 1.00 | 34.61 | A |
| ATOM | 791 | CE2 | TYR | A | 148 | 80.199 | 103.562 | 13.025 | 1.00 | 34.61 | A |
| ATOM | 792 | CZ | TYR | A | 148 | 81.113 | 102.569 | 13.359 | 1.00 | 34.61 | A |
| ATOM | 793 | OH | TYR | A | 148 | 81.571 | 101.697 | 12.393 | 1.00 | 34.61 | A |
| ATOM | 794 | C | TYR | A | 148 | 80.451 | 107.620 | 17.476 | 1.00 | 41.03 | A |
| ATOM | 795 | O | TYR | A | 148 | 80.125 | 107.324 | 18.632 | 1.00 | 41.03 | A |
| ATOM | 796 | N | SER | A | 149 | 80.428 | 108.865 | 17.019 | 1.00 | 37.11 | A |
| ATOM | 797 | CA | SER | A | 149 | 79.988 | 109.950 | 17.889 | 1.00 | 37.11 | A |
| ATOM | 798 | CB | SER | A | 149 | 81.093 | 111.002 | 18.051 | 1.00 | 35.33 | A |
| ATOM | 799 | OG | SER | A | 149 | 81.377 | 111.642 | 16.815 | 1.00 | 35.33 | A |
| ATOM | 800 | C | SER | A | 149 | 78.744 | 110.608 | 17.341 | 1.00 | 37.11 | A |
| ATOM | 801 | O | SER | A | 149 | 78.483 | 110.568 | 16.133 | 1.00 | 37.11 | A |
| ATOM | 802 | N | SER | A | 150 | 77.969 | 111.200 | 18.241 | 1.00 | 33.63 | A |
| ATOM | 803 | CA | SER | A | 150 | 76.758 | 111.890 | 17.842 | 1.00 | 33.63 | A |
| ATOM | 804 | CB | SER | A | 150 | 76.061 | 112.463 | 19.073 | 1.00 | 34.22 | A |
| ATOM | 805 | OG | SER | A | 150 | 74.954 | 113.257 | 18.689 | 1.00 | 34.22 | A |
| ATOM | 806 | C | SER | A | 150 | 77.153 | 113.017 | 16.892 | 1.00 | 33.63 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 807 | O | SER | A | 150 | 78.196 | 113.645 | 17.061 | 1.00 | 33.63 | A |
| ATOM | 808 | N | ASN | A | 151 | 76.331 | 113.267 | 15.885 | 1.00 | 44.56 | A |
| ATOM | 809 | CA | ASN | A | 151 | 76.615 | 114.323 | 14.927 | 1.00 | 44.56 | A |
| ATOM | 810 | CB | ASN | A | 151 | 76.181 | 113.882 | 13.523 | 1.00 | 38.21 | A |
| ATOM | 811 | CG | ASN | A | 151 | 76.577 | 114.876 | 12.442 | 1.00 | 38.21 | A |
| ATOM | 812 | OD1 | ASN | A | 151 | 77.750 | 115.243 | 12.312 | 1.00 | 38.21 | A |
| ATOM | 813 | ND2 | ASN | A | 151 | 75.602 | 115.306 | 11.650 | 1.00 | 38.21 | A |
| ATOM | 814 | C | ASN | A | 151 | 75.796 | 115.524 | 15.370 | 1.00 | 44.56 | A |
| ATOM | 815 | O | ASN | A | 151 | 75.771 | 116.556 | 14.705 | 1.00 | 44.56 | A |
| ATOM | 816 | N | LEU | A | 152 | 75.140 | 115.383 | 16.515 | 1.00 | 38.69 | A |
| ATOM | 817 | CA | LEU | A | 152 | 74.278 | 116.433 | 17.033 | 1.00 | 38.69 | A |
| ATOM | 818 | CB | LEU | A | 152 | 72.847 | 115.903 | 17.110 | 1.00 | 51.68 | A |
| ATOM | 819 | CG | LEU | A | 152 | 71.680 | 116.886 | 17.141 | 1.00 | 51.68 | A |
| ATOM | 820 | CD1 | LEU | A | 152 | 71.588 | 117.618 | 15.814 | 1.00 | 51.68 | A |
| ATOM | 821 | CD2 | LEU | A | 152 | 70.390 | 116.124 | 17.396 | 1.00 | 51.68 | A |
| ATOM | 822 | C | LEU | A | 152 | 74.697 | 116.952 | 18.403 | 1.00 | 38.69 | A |
| ATOM | 823 | O | LEU | A | 152 | 74.609 | 118.142 | 18.664 | 1.00 | 38.69 | A |
| ATOM | 824 | N | TYR | A | 153 | 75.155 | 116.062 | 19.272 | 1.00 | 47.26 | A |
| ATOM | 825 | CA | TYR | A | 153 | 75.538 | 116.460 | 20.615 | 1.00 | 47.26 | A |
| ATOM | 826 | CB | TYR | A | 153 | 74.732 | 115.653 | 21.626 | 1.00 | 46.55 | A |
| ATOM | 827 | CG | TYR | A | 153 | 73.250 | 115.726 | 21.362 | 1.00 | 46.55 | A |
| ATOM | 828 | CD1 | TYR | A | 153 | 72.601 | 116.965 | 21.276 | 1.00 | 46.55 | A |
| ATOM | 829 | CE1 | TYR | A | 153 | 71.237 | 117.047 | 21.012 | 1.00 | 46.55 | A |
| ATOM | 830 | CD2 | TYR | A | 153 | 72.491 | 114.566 | 21.178 | 1.00 | 46.55 | A |
| ATOM | 831 | CE2 | TYR | A | 153 | 71.124 | 114.636 | 20.915 | 1.00 | 46.55 | A |
| ATOM | 832 | CZ | TYR | A | 153 | 70.505 | 115.882 | 20.834 | 1.00 | 46.55 | A |
| ATOM | 833 | OH | TYR | A | 153 | 69.157 | 115.971 | 20.582 | 1.00 | 46.55 | A |
| ATOM | 834 | C | TYR | A | 153 | 77.020 | 116.289 | 20.880 | 1.00 | 47.26 | A |
| ATOM | 835 | O | TYR | A | 153 | 77.664 | 115.421 | 20.298 | 1.00 | 47.26 | A |
| ATOM | 836 | N | LYS | A | 154 | 77.548 | 117.118 | 21.773 | 1.00 | 39.81 | A |
| ATOM | 837 | CA | LYS | A | 154 | 78.962 | 117.092 | 22.133 | 1.00 | 39.81 | A |
| ATOM | 838 | CB | LYS | A | 154 | 79.797 | 117.695 | 21.014 | 1.00 | 41.23 | A |
| ATOM | 839 | CG | LYS | A | 154 | 79.470 | 119.159 | 20.787 | 1.00 | 41.23 | A |
| ATOM | 840 | CD | LYS | A | 154 | 80.408 | 119.822 | 19.798 | 1.00 | 41.23 | A |
| ATOM | 841 | CE | LYS | A | 154 | 79.997 | 121.272 | 19.545 | 1.00 | 41.23 | A |
| ATOM | 842 | NZ | LYS | A | 154 | 80.896 | 121.935 | 18.551 | 1.00 | 41.23 | A |
| ATOM | 843 | C | LYS | A | 154 | 79.194 | 117.933 | 23.381 | 1.00 | 39.81 | A |
| ATOM | 844 | O | LYS | A | 154 | 78.296 | 118.629 | 23.845 | 1.00 | 39.81 | A |
| ATOM | 845 | N | HIS | A | 155 | 80.412 | 117.851 | 23.914 | 1.00 | 48.33 | A |
| ATOM | 846 | CA | HIS | A | 155 | 80.818 | 118.644 | 25.071 | 1.00 | 48.33 | A |
| ATOM | 847 | CB | HIS | A | 155 | 82.072 | 118.055 | 25.711 | 1.00 | 37.58 | A |
| ATOM | 848 | CG | HIS | A | 155 | 81.857 | 116.718 | 26.341 | 1.00 | 37.58 | A |
| ATOM | 849 | CD2 | HIS | A | 155 | 82.163 | 115.470 | 25.912 | 1.00 | 37.58 | A |
| ATOM | 850 | ND1 | HIS | A | 155 | 81.246 | 116.562 | 27.567 | 1.00 | 37.58 | A |
| ATOM | 851 | CE1 | HIS | A | 155 | 81.185 | 115.275 | 27.868 | 1.00 | 37.58 | A |
| ATOM | 852 | NE2 | HIS | A | 155 | 81.734 | 114.591 | 26.880 | 1.00 | 37.58 | A |
| ATOM | 853 | C | HIS | A | 155 | 81.149 | 119.998 | 24.450 | 1.00 | 48.33 | A |
| ATOM | 854 | O | HIS | A | 155 | 82.192 | 120.161 | 23.823 | 1.00 | 48.33 | A |
| ATOM | 855 | N | VAL | A | 156 | 80.257 | 120.964 | 24.616 | 1.00 | 45.48 | A |
| ATOM | 856 | CA | VAL | A | 156 | 80.445 | 122.275 | 24.019 | 1.00 | 45.48 | A |
| ATOM | 857 | CB | VAL | A | 156 | 79.139 | 123.099 | 24.128 | 1.00 | 45.55 | A |
| ATOM | 858 | CG1 | VAL | A | 156 | 79.352 | 124.481 | 23.590 | 1.00 | 45.55 | A |
| ATOM | 859 | CG2 | VAL | A | 156 | 78.027 | 122.419 | 23.325 | 1.00 | 45.55 | A |
| ATOM | 860 | C | VAL | A | 156 | 81.632 | 123.085 | 24.554 | 1.00 | 45.48 | A |
| ATOM | 861 | O | VAL | A | 156 | 82.168 | 123.940 | 23.846 | 1.00 | 45.48 | A |
| ATOM | 862 | N | ASP | A | 157 | 82.062 | 122.807 | 25.781 | 1.00 | 46.18 | A |
| ATOM | 863 | CA | ASP | A | 157 | 83.181 | 123.540 | 26.355 | 1.00 | 46.18 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 864 | CB | ASP | A | 157 | 83.130 | 123.485 | 27.892 | 1.00 | 48.96 | A |
| ATOM | 865 | CG | ASP | A | 157 | 83.086 | 122.063 | 28.437 | 1.00 | 48.96 | A |
| ATOM | 866 | OD1 | ASP | A | 157 | 83.180 | 121.101 | 27.642 | 1.00 | 48.96 | A |
| ATOM | 867 | OD2 | ASP | A | 157 | 82.961 | 121.911 | 29.674 | 1.00 | 48.96 | A |
| ATOM | 868 | C | ASP | A | 157 | 84.548 | 123.069 | 25.856 | 1.00 | 46.18 | A |
| ATOM | 869 | O | ASP | A | 157 | 85.434 | 123.890 | 25.606 | 1.00 | 46.18 | A |
| ATOM | 870 | N | THR | A | 158 | 84.726 | 121.760 | 25.704 | 1.00 | 43.07 | A |
| ATOM | 871 | CA | THR | A | 158 | 86.001 | 121.235 | 25.235 | 1.00 | 43.07 | A |
| ATOM | 872 | CB | THR | A | 158 | 86.454 | 119.998 | 26.038 | 1.00 | 38.95 | A |
| ATOM | 873 | OG1 | THR | A | 158 | 85.542 | 118.914 | 25.816 | 1.00 | 38.95 | A |
| ATOM | 874 | CG2 | THR | A | 158 | 86.512 | 120.321 | 27.523 | 1.00 | 38.95 | A |
| ATOM | 875 | C | THR | A | 158 | 85.954 | 120.839 | 23.773 | 1.00 | 43.07 | A |
| ATOM | 876 | O | THR | A | 158 | 86.990 | 120.643 | 23.149 | 1.00 | 43.07 | A |
| ATOM | 877 | N | GLY | A | 159 | 84.753 | 120.729 | 23.220 | 1.00 | 46.65 | A |
| ATOM | 878 | CA | GLY | A | 159 | 84.631 | 120.321 | 21.831 | 1.00 | 46.65 | A |
| ATOM | 879 | C | GLY | A | 159 | 84.608 | 118.805 | 21.691 | 1.00 | 46.65 | A |
| ATOM | 880 | O | GLY | A | 159 | 84.226 | 118.280 | 20.649 | 1.00 | 46.65 | A |
| ATOM | 881 | N | ARG | A | 160 | 85.015 | 118.099 | 22.741 | 1.00 | 45.58 | A |
| ATOM | 882 | CA | ARG | A | 160 | 85.013 | 116.642 | 22.722 | 1.00 | 45.58 | A |
| ATOM | 883 | CB | ARG | A | 160 | 85.470 | 116.088 | 24.068 | 1.00 | 96.26 | A |
| ATOM | 884 | CG | ARG | A | 160 | 86.942 | 116.275 | 24.330 | 1.00 | 96.26 | A |
| ATOM | 885 | CD | ARG | A | 160 | 87.299 | 115.755 | 25.706 | 1.00 | 96.26 | A |
| ATOM | 886 | NE | ARG | A | 160 | 88.721 | 115.899 | 25.991 | 1.00 | 96.26 | A |
| ATOM | 887 | CZ | ARG | A | 160 | 89.679 | 115.244 | 25.345 | 1.00 | 96.26 | A |
| ATOM | 888 | NH1 | ARG | A | 160 | 89.370 | 114.395 | 24.374 | 1.00 | 96.26 | A |
| ATOM | 889 | NH2 | ARG | A | 160 | 90.949 | 115.439 | 25.671 | 1.00 | 96.26 | A |
| ATOM | 890 | C | ARG | A | 160 | 83.633 | 116.070 | 22.371 | 1.00 | 45.58 | A |
| ATOM | 891 | O | ARG | A | 160 | 82.584 | 116.611 | 22.758 | 1.00 | 45.58 | A |
| ATOM | 892 | N | ARG | A | 161 | 83.658 | 114.950 | 21.658 | 1.00 | 34.58 | A |
| ATOM | 893 | CA | ARG | A | 161 | 82.452 | 114.287 | 21.197 | 1.00 | 34.58 | A |
| ATOM | 894 | CB | ARG | A | 161 | 82.776 | 113.570 | 19.885 | 1.00 | 44.43 | A |
| ATOM | 895 | CG | ARG | A | 161 | 83.066 | 114.552 | 18.778 | 1.00 | 44.43 | A |
| ATOM | 896 | CD | ARG | A | 161 | 81.783 | 115.300 | 18.531 | 1.00 | 44.43 | A |
| ATOM | 897 | NE | ARG | A | 161 | 81.951 | 116.561 | 17.844 | 1.00 | 44.43 | A |
| ATOM | 898 | CZ | ARG | A | 161 | 80.971 | 117.170 | 17.186 | 1.00 | 44.43 | A |
| ATOM | 899 | NH1 | ARG | A | 161 | 79.764 | 116.616 | 17.124 | 1.00 | 44.43 | A |
| ATOM | 900 | NH2 | ARG | A | 161 | 81.196 | 118.344 | 16.613 | 1.00 | 44.43 | A |
| ATOM | 901 | C | ARG | A | 161 | 81.806 | 113.328 | 22.177 | 1.00 | 34.58 | A |
| ATOM | 902 | O | ARG | A | 161 | 82.406 | 112.957 | 23.182 | 1.00 | 34.58 | A |
| ATOM | 903 | N | TYR | A | 162 | 80.557 | 112.972 | 21.890 | 1.00 | 34.84 | A |
| ATOM | 904 | CA | TYR | A | 162 | 79.796 | 112.006 | 22.688 | 1.00 | 34.84 | A |
| ATOM | 905 | CB | TYR | A | 162 | 78.312 | 112.381 | 22.751 | 1.00 | 45.35 | A |
| ATOM | 906 | CG | TYR | A | 162 | 77.922 | 113.462 | 23.741 | 1.00 | 45.35 | A |
| ATOM | 907 | CD1 | TYR | A | 162 | 78.879 | 114.179 | 24.462 | 1.00 | 45.35 | A |
| ATOM | 908 | CE1 | TYR | A | 162 | 78.500 | 115.160 | 25.369 | 1.00 | 45.35 | A |
| ATOM | 909 | CD2 | TYR | A | 162 | 76.578 | 113.760 | 23.952 | 1.00 | 45.35 | A |
| ATOM | 910 | CE2 | TYR | A | 162 | 76.188 | 114.730 | 24.843 | 1.00 | 45.35 | A |
| ATOM | 911 | CZ | TYR | A | 162 | 77.140 | 115.432 | 25.556 | 1.00 | 45.35 | A |
| ATOM | 912 | OH | TYR | A | 162 | 76.717 | 116.395 | 26.452 | 1.00 | 45.35 | A |
| ATOM | 913 | C | TYR | A | 162 | 79.927 | 110.696 | 21.909 | 1.00 | 34.84 | A |
| ATOM | 914 | O | TYR | A | 162 | 79.444 | 110.594 | 20.776 | 1.00 | 34.84 | A |
| ATOM | 915 | N | TYR | A | 163 | 80.567 | 109.696 | 22.502 | 1.00 | 38.71 | A |
| ATOM | 916 | CA | TYR | A | 163 | 80.762 | 108.434 | 21.804 | 1.00 | 38.71 | A |
| ATOM | 917 | CB | TYR | A | 163 | 82.221 | 107.976 | 21.935 | 1.00 | 34.22 | A |
| ATOM | 918 | CG | TYR | A | 163 | 83.200 | 108.867 | 21.218 | 1.00 | 34.22 | A |
| ATOM | 919 | CD1 | TYR | A | 163 | 83.679 | 110.035 | 21.815 | 1.00 | 34.22 | A |
| ATOM | 920 | CE1 | TYR | A | 163 | 84.518 | 110.905 | 21.123 | 1.00 | 34.22 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|-----|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 921 | CD2 | TYR | A | 163 | 83.591 | 108.585 | 19.908 | 1.00 | 34.22 | A |
| ATOM | 922 | CE2 | TYR | A | 163 | 84.421 | 109.445 | 19.205 | 1.00 | 34.22 | A |
| ATOM | 923 | CZ | TYR | A | 163 | 84.881 | 110.607 | 19.818 | 1.00 | 34.22 | A |
| ATOM | 924 | OH | TYR | A | 163 | 85.677 | 111.471 | 19.111 | 1.00 | 34.22 | A |
| ATOM | 925 | C | TYR | A | 163 | 79.870 | 107.278 | 22.210 | 1.00 | 38.71 | A |
| ATOM | 926 | O | TYR | A | 163 | 79.588 | 107.073 | 23.397 | 1.00 | 38.71 | A |
| ATOM | 927 | N | VAL | A | 164 | 79.429 | 106.522 | 21.203 | 1.00 | 30.31 | A |
| ATOM | 928 | CA | VAL | A | 164 | 78.633 | 105.321 | 21.434 | 1.00 | 30.31 | A |
| ATOM | 929 | CB | VAL | A | 164 | 78.267 | 104.608 | 20.108 | 1.00 | 28.31 | A |
| ATOM | 930 | CG1 | VAL | A | 164 | 77.683 | 103.227 | 20.409 | 1.00 | 28.31 | A |
| ATOM | 931 | CG2 | VAL | A | 164 | 77.282 | 105.458 | 19.290 | 1.00 | 28.31 | A |
| ATOM | 932 | C | VAL | A | 164 | 79.600 | 104.419 | 22.199 | 1.00 | 30.31 | A |
| ATOM | 933 | O | VAL | A | 164 | 80.785 | 104.361 | 21.859 | 1.00 | 30.31 | A |
| ATOM | 934 | N | ALA | A | 165 | 79.119 | 103.714 | 23.219 | 1.00 | 32.57 | A |
| ATOM | 935 | CA | ALA | A | 165 | 80.015 | 102.860 | 23.975 | 1.00 | 32.57 | A |
| ATOM | 936 | CB | ALA | A | 165 | 80.900 | 103.714 | 24.875 | 1.00 | 45.92 | A |
| ATOM | 937 | C | ALA | A | 165 | 79.332 | 101.792 | 24.804 | 1.00 | 32.57 | A |
| ATOM | 938 | O | ALA | A | 165 | 78.219 | 101.982 | 25.296 | 1.00 | 32.57 | A |
| ATOM | 939 | N | LEU | A | 166 | 80.012 | 100.660 | 24.953 | 1.00 | 42.13 | A |
| ATOM | 940 | CA | LEU | A | 166 | 79.498 | 99.565 | 25.756 | 1.00 | 42.13 | A |
| ATOM | 941 | CB | LEU | A | 166 | 79.302 | 98.305 | 24.906 | 1.00 | 36.18 | A |
| ATOM | 942 | CG | LEU | A | 166 | 78.240 | 98.396 | 23.805 | 1.00 | 36.18 | A |
| ATOM | 943 | CD1 | LEU | A | 166 | 78.150 | 97.066 | 23.063 | 1.00 | 36.18 | A |
| ATOM | 944 | CD2 | LEU | A | 166 | 76.897 | 98.760 | 24.412 | 1.00 | 36.18 | A |
| ATOM | 945 | C | LEU | A | 166 | 80.530 | 99.311 | 26.847 | 1.00 | 42.13 | A |
| ATOM | 946 | O | LEU | A | 166 | 81.726 | 99.233 | 26.571 | 1.00 | 42.13 | A |
| ATOM | 947 | N | ASN | A | 167 | 80.067 | 99.190 | 28.086 | 1.00 | 44.32 | A |
| ATOM | 948 | CA | ASN | A | 167 | 80.965 | 98.960 | 29.206 | 1.00 | 44.32 | A |
| ATOM | 949 | CB | ASN | A | 167 | 80.219 | 99.214 | 30.509 | 1.00 | 45.55 | A |
| ATOM | 950 | CG | ASN | A | 167 | 79.882 | 100.672 | 30.692 | 1.00 | 45.55 | A |
| ATOM | 951 | OD1 | ASN | A | 167 | 80.775 | 101.516 | 30.692 | 1.00 | 45.55 | A |
| ATOM | 952 | ND2 | ASN | A | 167 | 78.595 | 100.983 | 30.837 | 1.00 | 45.55 | A |
| ATOM | 953 | C | ASN | A | 167 | 81.605 | 97.575 | 29.232 | 1.00 | 44.32 | A |
| ATOM | 954 | O | ASN | A | 167 | 81.255 | 96.699 | 28.432 | 1.00 | 44.32 | A |
| ATOM | 955 | N | LYS | A | 168 | 82.556 | 97.387 | 30.149 | 1.00 | 50.03 | A |
| ATOM | 956 | CA | LYS | A | 168 | 83.242 | 96.106 | 30.287 | 1.00 | 50.03 | A |
| ATOM | 957 | CB | LYS | A | 168 | 84.227 | 96.132 | 31.457 | 1.00 | 71.50 | A |
| ATOM | 958 | CG | LYS | A | 168 | 85.484 | 96.916 | 31.193 | 1.00 | 71.50 | A |
| ATOM | 959 | CD | LYS | A | 168 | 86.451 | 96.793 | 32.362 | 1.00 | 71.50 | A |
| ATOM | 960 | CE | LYS | A | 168 | 87.746 | 97.558 | 32.103 | 1.00 | 71.50 | A |
| ATOM | 961 | NZ | LYS | A | 168 | 88.618 | 97.592 | 33.318 | 1.00 | 71.50 | A |
| ATOM | 962 | C | LYS | A | 168 | 82.245 | 94.986 | 30.513 | 1.00 | 50.03 | A |
| ATOM | 963 | O | LYS | A | 168 | 82.538 | 93.832 | 30.235 | 1.00 | 50.03 | A |
| ATOM | 964 | N | ASP | A | 169 | 81.066 | 95.337 | 31.013 | 1.00 | 53.99 | A |
| ATOM | 965 | CA | ASP | A | 169 | 80.020 | 94.360 | 31.291 | 1.00 | 53.99 | A |
| ATOM | 966 | CB | ASP | A | 169 | 79.415 | 94.635 | 32.668 | 1.00 | 59.01 | A |
| ATOM | 967 | CG | ASP | A | 169 | 78.633 | 95.939 | 32.714 | 1.00 | 59.01 | A |
| ATOM | 968 | OD1 | ASP | A | 169 | 78.901 | 96.840 | 31.889 | 1.00 | 59.01 | A |
| ATOM | 969 | OD2 | ASP | A | 169 | 77.751 | 96.068 | 33.589 | 1.00 | 59.01 | A |
| ATOM | 970 | C | ASP | A | 169 | 78.914 | 94.354 | 30.234 | 1.00 | 53.99 | A |
| ATOM | 971 | O | ASP | A | 169 | 77.797 | 93.903 | 30.503 | 1.00 | 53.99 | A |
| ATOM | 972 | N | GLY | A | 170 | 79.220 | 94.865 | 29.040 | 1.00 | 48.11 | A |
| ATOM | 973 | CA | GLY | A | 170 | 78.243 | 94.876 | 27.960 | 1.00 | 48.11 | A |
| ATOM | 974 | C | GLY | A | 170 | 77.100 | 95.855 | 28.136 | 1.00 | 48.11 | A |
| ATOM | 975 | O | GLY | A | 170 | 76.172 | 95.902 | 27.331 | 1.00 | 48.11 | A |
| ATOM | 976 | N | THR | A | 171 | 77.161 | 96.629 | 29.207 | 1.00 | 39.40 | A |
| ATOM | 977 | CA | THR | A | 171 | 76.148 | 97.637 | 29.493 | 1.00 | 39.40 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 978 | CB | THR | A | 171 | 76.218 | 98.067 | 30.972 | 1.00 | 60.37 | A |
| ATOM | 979 | OG1 | THR | A | 171 | 75.692 | 97.024 | 31.794 | 1.00 | 60.37 | A |
| ATOM | 980 | CG2 | THR | A | 171 | 75.418 | 99.327 | 31.207 | 1.00 | 60.37 | A |
| ATOM | 981 | C | THR | A | 171 | 76.371 | 98.876 | 28.615 | 1.00 | 39.40 | A |
| ATOM | 982 | O | THR | A | 171 | 77.514 | 99.259 | 28.339 | 1.00 | 39.40 | A |
| ATOM | 983 | N | PRO | A | 172 | 75.284 | 99.497 | 28.132 | 1.00 | 35.13 | A |
| ATOM | 984 | CD | PRO | A | 172 | 73.846 | 99.191 | 28.235 | 1.00 | 29.81 | A |
| ATOM | 985 | CA | PRO | A | 172 | 75.519 | 100.686 | 27.312 | 1.00 | 35.13 | A |
| ATOM | 986 | CB | PRO | A | 172 | 74.136 | 100.988 | 26.732 | 1.00 | 29.81 | A |
| ATOM | 987 | CG | PRO | A | 172 | 73.209 | 100.500 | 27.800 | 1.00 | 29.81 | A |
| ATOM | 988 | C | PRO | A | 172 | 76.040 | 101.792 | 28.243 | 1.00 | 35.13 | A |
| ATOM | 989 | O | PRO | A | 172 | 75.635 | 101.875 | 29.401 | 1.00 | 35.13 | A |
| ATOM | 990 | N | ARG | A | 173 | 76.958 | 102.615 | 27.752 | 1.00 | 41.92 | A |
| ATOM | 991 | CA | ARG | A | 173 | 77.502 | 103.681 | 28.567 | 1.00 | 41.92 | A |
| ATOM | 992 | CB | ARG | A | 173 | 79.034 | 103.692 | 28.475 | 1.00 | 50.58 | A |
| ATOM | 993 | CG | ARG | A | 173 | 79.684 | 104.942 | 29.049 | 1.00 | 50.58 | A |
| ATOM | 994 | CD | ARG | A | 173 | 81.198 | 104.844 | 29.090 | 1.00 | 50.58 | A |
| ATOM | 995 | NE | ARG | A | 173 | 81.650 | 104.278 | 30.353 | 1.00 | 50.58 | A |
| ATOM | 996 | CZ | ARG | A | 173 | 82.123 | 104.986 | 31.378 | 1.00 | 50.58 | A |
| ATOM | 997 | NH1 | ARG | A | 173 | 82.224 | 106.304 | 31.296 | 1.00 | 50.58 | A |
| ATOM | 998 | NH2 | ARG | A | 173 | 82.465 | 104.372 | 32.504 | 1.00 | 50.58 | A |
| ATOM | 999 | C | ARG | A | 173 | 76.935 | 105.029 | 28.142 | 1.00 | 41.92 | A |
| ATOM | 1000 | O | ARG | A | 173 | 76.502 | 105.208 | 27.000 | 1.00 | 41.92 | A |
| ATOM | 1001 | N | GLU | A | 174 | 76.913 | 105.974 | 29.074 | 1.00 | 35.06 | A |
| ATOM | 1002 | CA | GLU | A | 174 | 76.427 | 107.310 | 28.771 | 1.00 | 35.06 | A |
| ATOM | 1003 | CB | GLU | A | 174 | 76.381 | 108.174 | 30.041 | 1.00 | 68.78 | A |
| ATOM | 1004 | CG | GLU | A | 174 | 75.527 | 107.601 | 31.165 | 1.00 | 68.78 | A |
| ATOM | 1005 | CD | GLU | A | 174 | 76.269 | 106.590 | 32.042 | 1.00 | 68.78 | A |
| ATOM | 1006 | OE1 | GLU | A | 174 | 77.015 | 105.741 | 31.506 | 1.00 | 68.78 | A |
| ATOM | 1007 | OE2 | GLU | A | 174 | 76.092 | 106.635 | 33.280 | 1.00 | 68.78 | A |
| ATOM | 1008 | C | GLU | A | 174 | 77.429 | 107.885 | 27.779 | 1.00 | 35.06 | A |
| ATOM | 1009 | O | GLU | A | 174 | 78.635 | 107.877 | 28.036 | 1.00 | 35.06 | A |
| ATOM | 1010 | N | GLY | A | 175 | 76.936 | 108.372 | 26.647 | 1.00 | 35.16 | A |
| ATOM | 1011 | CA | GLY | A | 175 | 77.825 | 108.928 | 25.638 | 1.00 | 35.16 | A |
| ATOM | 1012 | C | GLY | A | 175 | 78.479 | 110.182 | 26.152 | 1.00 | 35.16 | A |
| ATOM | 1013 | O | GLY | A | 175 | 79.390 | 110.750 | 25.554 | 1.00 | 35.16 | A |
| ATOM | 1014 | N | THR | A | 176 | 77.996 | 110.597 | 27.304 | 1.00 | 46.74 | A |
| ATOM | 1015 | CA | THR | A | 176 | 78.455 | 111.786 | 27.970 | 1.00 | 46.74 | A |
| ATOM | 1016 | CB | THR | A | 176 | 77.329 | 112.261 | 28.905 | 1.00 | 43.51 | A |
| ATOM | 1017 | OG1 | THR | A | 176 | 77.021 | 113.627 | 28.612 | 1.00 | 43.51 | A |
| ATOM | 1018 | CG2 | THR | A | 176 | 77.704 | 112.079 | 30.356 | 1.00 | 43.51 | A |
| ATOM | 1019 | C | THR | A | 176 | 79.753 | 111.539 | 28.743 | 1.00 | 46.74 | A |
| ATOM | 1020 | O | THR | A | 176 | 80.500 | 112.472 | 29.042 | 1.00 | 46.74 | A |
| ATOM | 1021 | N | ARG | A | 177 | 80.021 | 110.275 | 29.057 | 1.00 | 35.63 | A |
| ATOM | 1022 | CA | ARG | A | 177 | 81.209 | 109.906 | 29.815 | 1.00 | 35.63 | A |
| ATOM | 1023 | CB | ARG | A | 177 | 80.809 | 109.139 | 31.078 | 1.00 | 62.21 | A |
| ATOM | 1024 | CG | ARG | A | 177 | 79.688 | 109.778 | 31.882 | 1.00 | 62.21 | A |
| ATOM | 1025 | CD | ARG | A | 177 | 79.780 | 109.366 | 33.335 | 1.00 | 62.21 | A |
| ATOM | 1026 | NE | ARG | A | 177 | 79.794 | 107.916 | 33.496 | 1.00 | 62.21 | A |
| ATOM | 1027 | CZ | ARG | A | 177 | 80.449 | 107.278 | 34.464 | 1.00 | 62.21 | A |
| ATOM | 1028 | NH1 | ARG | A | 177 | 81.146 | 107.973 | 35.353 | 1.00 | 62.21 | A |
| ATOM | 1029 | NH2 | ARG | A | 177 | 80.418 | 105.952 | 34.544 | 1.00 | 62.21 | A |
| ATOM | 1030 | C | ARG | A | 177 | 82.143 | 109.046 | 28.973 | 1.00 | 35.63 | A |
| ATOM | 1031 | O | ARG | A | 177 | 82.503 | 107.936 | 29.366 | 1.00 | 35.63 | A |
| ATOM | 1032 | N | THR | A | 178 | 82.546 | 109.561 | 27.817 | 1.00 | 30.90 | A |
| ATOM | 1033 | CA | THR | A | 178 | 83.418 | 108.798 | 26.940 | 1.00 | 30.90 | A |
| ATOM | 1034 | CB | THR | A | 178 | 82.591 | 108.089 | 25.827 | 1.00 | 28.20 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 1035 | OG1 | THR | A | 178 | 81.824 | 109.064 | 25.103 | 1.00 | 28.20 | A |
| ATOM | 1036 | CG2 | THR | A | 178 | 81.647 | 107.050 | 26.428 | 1.00 | 28.20 | A |
| ATOM | 1037 | C | THR | A | 178 | 84.460 | 109.684 | 26.280 | 1.00 | 30.90 | A |
| ATOM | 1038 | O | THR | A | 178 | 84.258 | 110.885 | 26.146 | 1.00 | 30.90 | A |
| ATOM | 1039 | N | LYS | A | 179 | 85.576 | 109.081 | 25.876 | 1.00 | 48.41 | A |
| ATOM | 1040 | CA | LYS | A | 179 | 86.653 | 109.796 | 25.192 | 1.00 | 48.41 | A |
| ATOM | 1041 | CB | LYS | A | 179 | 87.788 | 110.138 | 26.161 | 1.00 | 69.90 | A |
| ATOM | 1042 | CG | LYS | A | 179 | 87.432 | 111.284 | 27.091 | 1.00 | 69.90 | A |
| ATOM | 1043 | CD | LYS | A | 179 | 88.603 | 111.775 | 27.929 | 1.00 | 69.90 | A |
| ATOM | 1044 | CE | LYS | A | 179 | 88.180 | 112.976 | 28.798 | 1.00 | 69.90 | A |
| ATOM | 1045 | NZ | LYS | A | 179 | 89.250 | 113.510 | 29.718 | 1.00 | 69.90 | A |
| ATOM | 1046 | C | LYS | A | 179 | 87.154 | 108.920 | 24.049 | 1.00 | 48.41 | A |
| ATOM | 1047 | O | LYS | A | 179 | 87.414 | 107.733 | 24.235 | 1.00 | 48.41 | A |
| ATOM | 1048 | N | ARG | A | 180 | 87.264 | 109.521 | 22.867 | 1.00 | 46.56 | A |
| ATOM | 1049 | CA | ARG | A | 180 | 87.685 | 108.842 | 21.645 | 1.00 | 46.56 | A |
| ATOM | 1050 | CB | ARG | A | 180 | 88.307 | 109.849 | 20.667 | 1.00 | 34.05 | A |
| ATOM | 1051 | CG | ARG | A | 180 | 88.731 | 109.224 | 19.338 | 1.00 | 34.05 | A |
| ATOM | 1052 | CD | ARG | A | 180 | 89.535 | 110.180 | 18.467 | 1.00 | 34.05 | A |
| ATOM | 1053 | NE | ARG | A | 180 | 88.754 | 111.329 | 18.014 | 1.00 | 34.05 | A |
| ATOM | 1054 | CZ | ARG | A | 180 | 87.997 | 111.348 | 16.920 | 1.00 | 34.05 | A |
| ATOM | 1055 | NH1 | ARG | A | 180 | 87.906 | 110.278 | 16.140 | 1.00 | 34.05 | A |
| ATOM | 1056 | NH2 | ARG | A | 180 | 87.322 | 112.446 | 16.606 | 1.00 | 34.05 | A |
| ATOM | 1057 | C | ARG | A | 180 | 88.632 | 107.652 | 21.774 | 1.00 | 46.56 | A |
| ATOM | 1058 | O | ARG | A | 180 | 88.379 | 106.595 | 21.200 | 1.00 | 46.56 | A |
| ATOM | 1059 | N | HIS | A | 181 | 89.716 | 107.807 | 22.523 | 1.00 | 45.11 | A |
| ATOM | 1060 | CA | HIS | A | 181 | 90.692 | 106.728 | 22.636 | 1.00 | 45.11 | A |
| ATOM | 1061 | CB | HIS | A | 181 | 92.085 | 107.309 | 22.885 | 1.00 | 51.67 | A |
| ATOM | 1062 | CG | HIS | A | 181 | 92.527 | 108.261 | 21.820 | 1.00 | 51.67 | A |
| ATOM | 1063 | CD2 | HIS | A | 181 | 93.044 | 109.510 | 21.897 | 1.00 | 51.67 | A |
| ATOM | 1064 | ND1 | HIS | A | 181 | 92.419 | 107.970 | 20.476 | 1.00 | 51.67 | A |
| ATOM | 1065 | CE1 | HIS | A | 181 | 92.848 | 109.001 | 19.770 | 1.00 | 51.67 | A |
| ATOM | 1066 | NE2 | HIS | A | 181 | 93.232 | 109.949 | 20.607 | 1.00 | 51.67 | A |
| ATOM | 1067 | C | HIS | A | 181 | 90.410 | 105.633 | 23.638 | 1.00 | 45.11 | A |
| ATOM | 1068 | O | HIS | A | 181 | 91.122 | 104.637 | 23.675 | 1.00 | 45.11 | A |
| ATOM | 1069 | N | GLN | A | 182 | 89.386 | 105.800 | 24.458 | 1.00 | 45.11 | A |
| ATOM | 1070 | CA | GLN | A | 182 | 89.058 | 104.758 | 25.420 | 1.00 | 45.11 | A |
| ATOM | 1071 | CB | GLN | A | 182 | 87.965 | 105.241 | 26.375 | 1.00 | 50.78 | A |
| ATOM | 1072 | CG | GLN | A | 182 | 88.422 | 106.365 | 27.291 | 1.00 | 50.78 | A |
| ATOM | 1073 | CD | GLN | A | 182 | 87.339 | 106.820 | 28.247 | 1.00 | 50.78 | A |
| ATOM | 1074 | OE1 | GLN | A | 182 | 86.362 | 107.459 | 27.848 | 1.00 | 50.78 | A |
| ATOM | 1075 | NE2 | GLN | A | 182 | 87.501 | 106.481 | 29.520 | 1.00 | 50.78 | A |
| ATOM | 1076 | C | GLN | A | 182 | 88.595 | 103.508 | 24.661 | 1.00 | 45.11 | A |
| ATOM | 1077 | O | GLN | A | 182 | 87.964 | 103.597 | 23.601 | 1.00 | 45.11 | A |
| ATOM | 1078 | N | LYS | A | 183 | 88.916 | 102.342 | 25.204 | 1.00 | 45.48 | A |
| ATOM | 1079 | CA | LYS | A | 183 | 88.547 | 101.092 | 24.565 | 1.00 | 45.48 | A |
| ATOM | 1080 | CB | LYS | A | 183 | 89.126 | 99.911 | 25.354 | 1.00 | 99.67 | A |
| ATOM | 1081 | CG | LYS | A | 183 | 90.302 | 99.222 | 24.663 | 1.00 | 99.67 | A |
| ATOM | 1082 | CD | LYS | A | 183 | 91.509 | 100.142 | 24.485 | 1.00 | 99.67 | A |
| ATOM | 1083 | CE | LYS | A | 183 | 92.404 | 99.664 | 23.338 | 1.00 | 99.67 | A |
| ATOM | 1084 | NZ | LYS | A | 183 | 92.761 | 98.212 | 23.414 | 1.00 | 99.67 | A |
| ATOM | 1085 | C | LYS | A | 183 | 87.049 | 100.886 | 24.345 | 1.00 | 45.48 | A |
| ATOM | 1086 | O | LYS | A | 183 | 86.654 | 100.395 | 23.290 | 1.00 | 45.48 | A |
| ATOM | 1087 | N | PHE | A | 184 | 86.214 | 101.281 | 25.308 | 1.00 | 36.90 | A |
| ATOM | 1088 | CA | PHE | A | 184 | 84.780 | 101.067 | 25.157 | 1.00 | 36.90 | A |
| ATOM | 1089 | CB | PHE | A | 184 | 84.030 | 101.259 | 26.492 | 1.00 | 45.30 | A |
| ATOM | 1090 | CG | PHE | A | 184 | 84.341 | 102.541 | 27.220 | 1.00 | 45.30 | A |
| ATOM | 1091 | CD1 | PHE | A | 184 | 84.490 | 103.749 | 26.540 | 1.00 | 45.30 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 1092 | CD2 | PHE | A | 184 | 84.427 | 102.543 | 28.609 | 1.00 | 45.30 | A |
| ATOM | 1093 | CE1 | PHE | A | 184 | 84.718 | 104.946 | 27.237 | 1.00 | 45.30 | A |
| ATOM | 1094 | CE2 | PHE | A | 184 | 84.651 | 103.721 | 29.317 | 1.00 | 45.30 | A |
| ATOM | 1095 | CZ | PHE | A | 184 | 84.798 | 104.930 | 28.629 | 1.00 | 45.30 | A |
| ATOM | 1096 | C | PHE | A | 184 | 84.083 | 101.849 | 24.049 | 1.00 | 36.90 | A |
| ATOM | 1097 | O | PHE | A | 184 | 82.867 | 101.707 | 23.854 | 1.00 | 36.90 | A |
| ATOM | 1098 | N | THR | A | 185 | 84.847 | 102.652 | 23.311 | 1.00 | 33.33 | A |
| ATOM | 1099 | CA | THR | A | 185 | 84.290 | 103.432 | 22.206 | 1.00 | 33.33 | A |
| ATOM | 1100 | CB | THR | A | 185 | 84.769 | 104.905 | 22.259 | 1.00 | 42.77 | A |
| ATOM | 1101 | OG1 | THR | A | 185 | 86.196 | 104.951 | 22.168 | 1.00 | 42.77 | A |
| ATOM | 1102 | CG2 | THR | A | 185 | 84.343 | 105.556 | 23.556 | 1.00 | 42.77 | A |
| ATOM | 1103 | C | THR | A | 185 | 84.704 | 102.832 | 20.852 | 1.00 | 33.33 | A |
| ATOM | 1104 | O | THR | A | 185 | 84.244 | 103.260 | 19.792 | 1.00 | 33.33 | A |
| ATOM | 1105 | N | HIS | A | 186 | 85.567 | 101.826 | 20.895 | 1.00 | 33.46 | A |
| ATOM | 1106 | CA | HIS | A | 186 | 86.051 | 101.201 | 19.670 | 1.00 | 33.46 | A |
| ATOM | 1107 | CB | HIS | A | 186 | 87.455 | 100.639 | 19.900 | 1.00 | 42.98 | A |
| ATOM | 1108 | CG | HIS | A | 186 | 88.440 | 101.672 | 20.357 | 1.00 | 42.98 | A |
| ATOM | 1109 | CD2 | HIS | A | 186 | 88.292 | 102.998 | 20.591 | 1.00 | 42.98 | A |
| ATOM | 1110 | ND1 | HIS | A | 186 | 89.760 | 101.380 | 20.629 | 1.00 | 42.98 | A |
| ATOM | 1111 | CE1 | HIS | A | 186 | 90.380 | 102.482 | 21.012 | 1.00 | 42.98 | A |
| ATOM | 1112 | NE2 | HIS | A | 186 | 89.513 | 103.477 | 20.998 | 1.00 | 42.98 | A |
| ATOM | 1113 | C | HIS | A | 186 | 85.114 | 100.115 | 19.190 | 1.00 | 33.46 | A |
| ATOM | 1114 | O | HIS | A | 186 | 84.886 | 99.122 | 19.885 | 1.00 | 33.46 | A |
| ATOM | 1115 | N | PHE | A | 187 | 84.566 | 100.319 | 17.997 | 1.00 | 36.19 | A |
| ATOM | 1116 | CA | PHE | A | 187 | 83.644 | 99.361 | 17.412 | 1.00 | 36.19 | A |
| ATOM | 1117 | CB | PHE | A | 187 | 82.236 | 99.947 | 17.310 | 1.00 | 32.14 | A |
| ATOM | 1118 | CG | PHE | A | 187 | 81.518 | 100.047 | 18.619 | 1.00 | 32.14 | A |
| ATOM | 1119 | CD1 | PHE | A | 187 | 81.684 | 101.161 | 19.442 | 1.00 | 32.14 | A |
| ATOM | 1120 | CD2 | PHE | A | 187 | 80.640 | 99.037 | 19.024 | 1.00 | 32.14 | A |
| ATOM | 1121 | CE1 | PHE | A | 187 | 80.984 | 101.270 | 20.648 | 1.00 | 32.14 | A |
| ATOM | 1122 | CE2 | PHE | A | 187 | 79.936 | 99.140 | 20.234 | 1.00 | 32.14 | A |
| ATOM | 1123 | CZ | PHE | A | 187 | 80.108 | 100.262 | 21.044 | 1.00 | 32.14 | A |
| ATOM | 1124 | C | PHE | A | 187 | 84.084 | 98.913 | 16.025 | 1.00 | 36.19 | A |
| ATOM | 1125 | O | PHE | A | 187 | 84.286 | 99.726 | 15.124 | 1.00 | 36.19 | A |
| ATOM | 1126 | N | LEU | A | 188 | 84.202 | 97.601 | 15.868 | 1.00 | 35.26 | A |
| ATOM | 1127 | CA | LEU | A | 188 | 84.600 | 96.990 | 14.614 | 1.00 | 35.26 | A |
| ATOM | 1128 | CB | LEU | A | 188 | 85.540 | 95.821 | 14.911 | 1.00 | 36.91 | A |
| ATOM | 1129 | CG | LEU | A | 188 | 85.877 | 94.870 | 13.765 | 1.00 | 36.91 | A |
| ATOM | 1130 | CD1 | LEU | A | 188 | 86.762 | 95.575 | 12.747 | 1.00 | 36.91 | A |
| ATOM | 1131 | CD2 | LEU | A | 188 | 86.565 | 93.623 | 14.337 | 1.00 | 36.91 | A |
| ATOM | 1132 | C | LEU | A | 188 | 83.395 | 96.481 | 13.805 | 1.00 | 35.26 | A |
| ATOM | 1133 | O | LEU | A | 188 | 82.619 | 95.636 | 14.281 | 1.00 | 35.26 | A |
| ATOM | 1134 | N | PRO | A | 189 | 83.201 | 97.013 | 12.587 | 1.00 | 31.65 | A |
| ATOM | 1135 | CD | PRO | A | 189 | 83.807 | 98.218 | 11.995 | 1.00 | 16.57 | A |
| ATOM | 1136 | CA | PRO | A | 189 | 82.075 | 96.541 | 11.777 | 1.00 | 31.65 | A |
| ATOM | 1137 | CB | PRO | A | 189 | 82.037 | 97.526 | 10.605 | 1.00 | 16.57 | A |
| ATOM | 1138 | CG | PRO | A | 189 | 82.696 | 98.754 | 11.141 | 1.00 | 16.57 | A |
| ATOM | 1139 | C | PRO | A | 189 | 82.444 | 95.129 | 11.313 | 1.00 | 31.65 | A |
| ATOM | 1140 | O | PRO | A | 189 | 83.447 | 94.943 | 10.618 | 1.00 | 31.65 | A |
| ATOM | 1141 | N | ARG | A | 190 | 81.654 | 94.140 | 11.714 | 1.00 | 32.96 | A |
| ATOM | 1142 | CA | ARG | A | 190 | 81.929 | 92.765 | 11.337 | 1.00 | 32.96 | A |
| ATOM | 1143 | CB | ARG | A | 190 | 81.900 | 91.847 | 12.555 | 1.00 | 32.13 | A |
| ATOM | 1144 | CG | ARG | A | 190 | 83.004 | 92.081 | 13.543 | 1.00 | 32.13 | A |
| ATOM | 1145 | CD | ARG | A | 190 | 83.550 | 90.757 | 13.987 | 1.00 | 32.13 | A |
| ATOM | 1146 | NE | ARG | A | 190 | 82.515 | 89.977 | 14.635 | 1.00 | 32.13 | A |
| ATOM | 1147 | CZ | ARG | A | 190 | 82.240 | 88.701 | 14.375 | 1.00 | 32.13 | A |
| ATOM | 1148 | NH1 | ARG | A | 190 | 82.925 | 88.021 | 13.464 | 1.00 | 32.13 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|--------|--------|------|--------|---|
| ATOM | 1149 | NH2 | ARG | A | 190 | 81.264 | 88.106 | 15.044 | 1.00 | 32.13 | A |
| ATOM | 1150 | C | ARG | A | 190 | 80.914 | 92.288 | 10.332 | 1.00 | 32.96 | A |
| ATOM | 1151 | O | ARG | A | 190 | 79.806 | 92.812 | 10.258 | 1.00 | 32.96 | A |
| ATOM | 1152 | N | PRO | A | 191 | 81.277 | 91.274 | 9.540 | 1.00 | 39.93 | A |
| ATOM | 1153 | CD | PRO | A | 191 | 82.594 | 90.616 | 9.406 | 1.00 | 36.93 | A |
| ATOM | 1154 | CA | PRO | A | 191 | 80.333 | 90.772 | 8.545 | 1.00 | 39.93 | A |
| ATOM | 1155 | CB | PRO | A | 191 | 81.249 | 90.096 | 7.531 | 1.00 | 36.93 | A |
| ATOM | 1156 | CG | PRO | A | 191 | 82.321 | 89.520 | 8.405 | 1.00 | 36.93 | A |
| ATOM | 1157 | C | PRO | A | 191 | 79.306 | 89.816 | 9.133 | 1.00 | 39.93 | A |
| ATOM | 1158 | O | PRO | A | 191 | 79.425 | 89.352 | 10.269 | 1.00 | 39.93 | A |
| ATOM | 1159 | N | VAL | A | 192 | 78.282 | 89.542 | 8.343 | 1.00 | 38.04 | A |
| ATOM | 1160 | CA | VAL | A | 192 | 77.229 | 88.615 | 8.729 | 1.00 | 38.04 | A |
| ATOM | 1161 | CB | VAL | A | 192 | 75.840 | 89.308 | 8.775 | 1.00 | 40.58 | A |
| ATOM | 1162 | CG1 | VAL | A | 192 | 74.745 | 88.259 | 8.965 | 1.00 | 40.58 | A |
| ATOM | 1163 | CG2 | VAL | A | 192 | 75.795 | 90.324 | 9.906 | 1.00 | 40.58 | A |
| ATOM | 1164 | C | VAL | A | 192 | 77.197 | 87.527 | 7.661 | 1.00 | 38.04 | A |
| ATOM | 1165 | O | VAL | A | 192 | 77.260 | 87.822 | 6.465 | 1.00 | 38.04 | A |
| ATOM | 1166 | N | ASP | A | 193 | 77.113 | 86.271 | 8.074 | 1.00 | 39.71 | A |
| ATOM | 1167 | CA | ASP | A | 193 | 77.059 | 85.210 | 7.081 | 1.00 | 39.71 | A |
| ATOM | 1168 | CB | ASP | A | 193 | 77.427 | 83.865 | 7.695 | 1.00 | 59.08 | A |
| ATOM | 1169 | CG | ASP | A | 193 | 77.489 | 82.764 | 6.659 | 1.00 | 59.08 | A |
| ATOM | 1170 | OD1 | ASP | A | 193 | 76.431 | 82.424 | 6.090 | 1.00 | 59.08 | A |
| ATOM | 1171 | OD2 | ASP | A | 193 | 78.599 | 82.245 | 6.400 | 1.00 | 59.08 | A |
| ATOM | 1172 | C | ASP | A | 193 | 75.656 | 85.137 | 6.468 | 1.00 | 39.71 | A |
| ATOM | 1173 | O | ASP | A | 193 | 74.648 | 85.232 | 7.185 | 1.00 | 39.71 | A |
| ATOM | 1174 | N | PRO | A | 194 | 75.576 | 84.985 | 5.129 | 1.00 | 34.27 | A |
| ATOM | 1175 | CD | PRO | A | 194 | 76.707 | 84.758 | 4.216 | 1.00 | 39.43 | A |
| ATOM | 1176 | CA | PRO | A | 194 | 74.302 | 84.896 | 4.402 | 1.00 | 34.27 | A |
| ATOM | 1177 | CB | PRO | A | 194 | 74.742 | 84.621 | 2.966 | 1.00 | 39.43 | A |
| ATOM | 1178 | CG | PRO | A | 194 | 76.069 | 83.935 | 3.132 | 1.00 | 39.43 | A |
| ATOM | 1179 | C | PRO | A | 194 | 73.367 | 83.813 | 4.952 | 1.00 | 34.27 | A |
| ATOM | 1180 | O | PRO | A | 194 | 72.145 | 83.892 | 4.804 | 1.00 | 34.27 | A |
| ATOM | 1181 | N | ASP | A | 195 | 73.947 | 82.812 | 5.602 | 1.00 | 41.74 | A |
| ATOM | 1182 | CA | ASP | A | 195 | 73.159 | 81.740 | 6.177 | 1.00 | 41.74 | A |
| ATOM | 1183 | CB | ASP | A | 195 | 74.073 | 80.575 | 6.559 | 1.00 | 100.00 | A |
| ATOM | 1184 | CG | ASP | A | 195 | 74.763 | 79.963 | 5.340 | 1.00 | 100.00 | A |
| ATOM | 1185 | OD1 | ASP | A | 195 | 74.043 | 79.558 | 4.398 | 1.00 | 100.00 | A |
| ATOM | 1186 | OD2 | ASP | A | 195 | 76.015 | 79.893 | 5.313 | 1.00 | 100.00 | A |
| ATOM | 1187 | C | ASP | A | 195 | 72.381 | 82.269 | 7.376 | 1.00 | 41.74 | A |
| ATOM | 1188 | O | ASP | A | 195 | 71.441 | 81.630 | 7.846 | 1.00 | 41.74 | A |
| ATOM | 1189 | N | LYS | A | 196 | 72.767 | 83.451 | 7.851 | 1.00 | 47.47 | A |
| ATOM | 1190 | CA | LYS | A | 196 | 72.100 | 84.099 | 8.981 | 1.00 | 47.47 | A |
| ATOM | 1191 | CB | LYS | A | 196 | 73.116 | 84.531 | 10.043 | 1.00 | 52.41 | A |
| ATOM | 1192 | CG | LYS | A | 196 | 73.494 | 83.433 | 11.011 | 1.00 | 52.41 | A |
| ATOM | 1193 | CD | LYS | A | 196 | 72.315 | 83.101 | 11.900 | 1.00 | 52.41 | A |
| ATOM | 1194 | CE | LYS | A | 196 | 72.613 | 81.938 | 12.837 | 1.00 | 52.41 | A |
| ATOM | 1195 | NZ | LYS | A | 196 | 71.495 | 81.747 | 13.820 | 1.00 | 52.41 | A |
| ATOM | 1196 | C | LYS | A | 196 | 71.296 | 85.308 | 8.507 | 1.00 | 47.47 | A |
| ATOM | 1197 | O | LYS | A | 196 | 70.928 | 86.182 | 9.298 | 1.00 | 47.47 | A |
| ATOM | 1198 | N | VAL | A | 197 | 71.061 | 85.354 | 7.200 | 1.00 | 47.67 | A |
| ATOM | 1199 | CA | VAL | A | 197 | 70.259 | 86.397 | 6.564 | 1.00 | 47.67 | A |
| ATOM | 1200 | CB | VAL | A | 197 | 71.061 | 87.168 | 5.498 | 1.00 | 36.39 | A |
| ATOM | 1201 | CG1 | VAL | A | 197 | 70.175 | 88.218 | 4.834 | 1.00 | 36.39 | A |
| ATOM | 1202 | CG2 | VAL | A | 197 | 72.264 | 87.826 | 6.139 | 1.00 | 36.39 | A |
| ATOM | 1203 | C | VAL | A | 197 | 69.142 | 85.593 | 5.893 | 1.00 | 47.67 | A |
| ATOM | 1204 | O | VAL | A | 197 | 69.128 | 85.407 | 4.670 | 1.00 | 47.67 | A |
| ATOM | 1205 | N | PRO | A | 198 | 68.196 | 85.092 | 6.707 | 1.00 | 55.08 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|--------|--------|------|--------|---|
| ATOM | 1206 | CD | PRO | A | 198 | 68.107 | 85.412 | 8.144 | 1.00 | 48.19 | A |
| ATOM | 1207 | CA | PRO | A | 198 | 67.047 | 84.283 | 6.293 | 1.00 | 55.08 | A |
| ATOM | 1208 | CB | PRO | A | 198 | 66.324 | 84.004 | 7.614 | 1.00 | 48.19 | A |
| ATOM | 1209 | CG | PRO | A | 198 | 66.647 | 85.199 | 8.425 | 1.00 | 48.19 | A |
| ATOM | 1210 | C | PRO | A | 198 | 66.124 | 84.842 | 5.230 | 1.00 | 55.08 | A |
| ATOM | 1211 | O | PRO | A | 198 | 65.543 | 84.084 | 4.463 | 1.00 | 55.08 | A |
| ATOM | 1212 | N | GLU | A | 199 | 65.996 | 86.159 | 5.165 | 1.00 | 55.26 | A |
| ATOM | 1213 | CA | GLU | A | 199 | 65.114 | 86.770 | 4.181 | 1.00 | 55.26 | A |
| ATOM | 1214 | CB | GLU | A | 199 | 64.552 | 88.090 | 4.719 | 1.00 | 69.97 | A |
| ATOM | 1215 | CG | GLU | A | 199 | 65.592 | 89.187 | 4.918 | 1.00 | 69.97 | A |
| ATOM | 1216 | CD | GLU | A | 199 | 66.311 | 89.100 | 6.253 | 1.00 | 69.97 | A |
| ATOM | 1217 | OE1 | GLU | A | 199 | 66.731 | 87.991 | 6.642 | 1.00 | 69.97 | A |
| ATOM | 1218 | OE2 | GLU | A | 199 | 66.466 | 90.152 | 6.909 | 1.00 | 69.97 | A |
| ATOM | 1219 | C | GLU | A | 199 | 65.795 | 87.024 | 2.842 | 1.00 | 55.26 | A |
| ATOM | 1220 | O | GLU | A | 199 | 65.205 | 87.638 | 1.956 | 1.00 | 55.26 | A |
| ATOM | 1221 | N | LEU | A | 200 | 67.030 | 86.562 | 2.688 | 1.00 | 50.69 | A |
| ATOM | 1222 | CA | LEU | A | 200 | 67.760 | 86.777 | 1.437 | 1.00 | 50.69 | A |
| ATOM | 1223 | CB | LEU | A | 200 | 69.145 | 86.124 | 1.500 | 1.00 | 37.63 | A |
| ATOM | 1224 | CG | LEU | A | 200 | 69.911 | 86.143 | 0.174 | 1.00 | 37.63 | A |
| ATOM | 1225 | CD1 | LEU | A | 200 | 70.131 | 87.582 | -0.264 | 1.00 | 37.63 | A |
| ATOM | 1226 | CD2 | LEU | A | 200 | 71.222 | 85.435 | 0.330 | 1.00 | 37.63 | A |
| ATOM | 1227 | C | LEU | A | 200 | 67.023 | 86.247 | 0.211 | 1.00 | 50.69 | A |
| ATOM | 1228 | O | LEU | A | 200 | 66.899 | 86.936 | -0.804 | 1.00 | 50.69 | A |
| ATOM | 1229 | N | TYR | A | 201 | 66.537 | 85.018 | 0.311 | 1.00 | 43.20 | A |
| ATOM | 1230 | CA | TYR | A | 201 | 65.832 | 84.391 | -0.794 | 1.00 | 43.20 | A |
| ATOM | 1231 | CB | TYR | A | 201 | 65.398 | 82.977 | -0.409 | 1.00 | 40.00 | A |
| ATOM | 1232 | CG | TYR | A | 201 | 64.177 | 82.909 | 0.479 | 1.00 | 40.00 | A |
| ATOM | 1233 | CD1 | TYR | A | 201 | 64.282 | 83.036 | 1.862 | 1.00 | 40.00 | A |
| ATOM | 1234 | CE1 | TYR | A | 201 | 63.149 | 82.944 | 2.682 | 1.00 | 40.00 | A |
| ATOM | 1235 | CD2 | TYR | A | 201 | 62.911 | 82.695 | -0.069 | 1.00 | 40.00 | A |
| ATOM | 1236 | CE2 | TYR | A | 201 | 61.782 | 82.604 | 0.735 | 1.00 | 40.00 | A |
| ATOM | 1237 | CZ | TYR | A | 201 | 61.905 | 82.723 | 2.108 | 1.00 | 40.00 | A |
| ATOM | 1238 | OH | TYR | A | 201 | 60.785 | 82.587 | 2.898 | 1.00 | 40.00 | A |
| ATOM | 1239 | C | TYR | A | 201 | 64.612 | 85.190 | -1.239 | 1.00 | 43.20 | A |
| ATOM | 1240 | O | TYR | A | 201 | 64.202 | 85.112 | -2.397 | 1.00 | 43.20 | A |
| ATOM | 1241 | N | LYS | A | 202 | 64.022 | 85.948 | -0.321 | 1.00 | 49.95 | A |
| ATOM | 1242 | CA | LYS | A | 202 | 62.852 | 86.746 | -0.666 | 1.00 | 49.95 | A |
| ATOM | 1243 | CB | LYS | A | 202 | 62.247 | 87.382 | 0.590 | 1.00 | 54.88 | A |
| ATOM | 1244 | CG | LYS | A | 202 | 61.569 | 86.379 | 1.509 | 1.00 | 54.88 | A |
| ATOM | 1245 | CD | LYS | A | 202 | 61.122 | 87.016 | 2.812 | 1.00 | 54.88 | A |
| ATOM | 1246 | CE | LYS | A | 202 | 60.494 | 85.975 | 3.731 | 1.00 | 54.88 | A |
| ATOM | 1247 | NZ | LYS | A | 202 | 60.129 | 86.530 | 5.072 | 1.00 | 54.88 | A |
| ATOM | 1248 | C | LYS | A | 202 | 63.198 | 87.828 | -1.683 | 1.00 | 49.95 | A |
| ATOM | 1249 | O | LYS | A | 202 | 62.320 | 88.374 | -2.341 | 1.00 | 49.95 | A |
| ATOM | 1250 | N | ASP | A | 203 | 64.485 | 88.115 | -1.826 | 1.00 | 74.84 | A |
| ATOM | 1251 | CA | ASP | A | 203 | 64.923 | 89.145 | -2.748 | 1.00 | 74.84 | A |
| ATOM | 1252 | CB | ASP | A | 203 | 66.152 | 89.851 | -2.172 | 1.00 | 100.00 | A |
| ATOM | 1253 | CG | ASP | A | 203 | 65.829 | 90.644 | -0.916 | 1.00 | 100.00 | A |
| ATOM | 1254 | OD1 | ASP | A | 203 | 65.135 | 90.104 | -0.027 | 1.00 | 100.00 | A |
| ATOM | 1255 | OD2 | ASP | A | 203 | 66.272 | 91.805 | -0.814 | 1.00 | 100.00 | A |
| ATOM | 1256 | C | ASP | A | 203 | 65.209 | 88.650 | -4.163 | 1.00 | 74.84 | A |
| ATOM | 1257 | O | ASP | A | 203 | 65.449 | 89.453 | -5.064 | 1.00 | 74.84 | A |
| ATOM | 1258 | N | ILE | A | 204 | 65.187 | 87.337 | -4.371 | 1.00 | 57.37 | A |
| ATOM | 1259 | CA | ILE | A | 204 | 65.438 | 86.801 | -5.705 | 1.00 | 57.37 | A |
| ATOM | 1260 | CB | ILE | A | 204 | 66.806 | 86.127 | -5.819 | 1.00 | 79.68 | A |
| ATOM | 1261 | CG2 | ILE | A | 204 | 67.902 | 87.131 | -5.530 | 1.00 | 79.68 | A |
| ATOM | 1262 | CG1 | ILE | A | 204 | 66.867 | 84.930 | -4.878 | 1.00 | 79.68 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 1263 | CD1 | ILE | A | 204 | 68.091 | 84.086 | -5.073 | 1.00 | 79.68 | A |
| ATOM | 1264 | C | ILE | A | 204 | 64.402 | 85.777 | -6.110 | 1.00 | 57.37 | A |
| ATOM | 1265 | O | ILE | A | 204 | 64.270 | 85.460 | -7.290 | 1.00 | 57.37 | A |
| ATOM | 1266 | N | LEU | A | 205 | 63.677 | 85.246 | -5.133 | 1.00 | 60.17 | A |
| ATOM | 1267 | CA | LEU | A | 205 | 62.648 | 84.263 | -5.427 | 1.00 | 60.17 | A |
| ATOM | 1268 | CB | LEU | A | 205 | 62.634 | 83.161 | -4.365 | 1.00 | 56.15 | A |
| ATOM | 1269 | CG | LEU | A | 205 | 63.902 | 82.308 | -4.263 | 1.00 | 56.15 | A |
| ATOM | 1270 | CD1 | LEU | A | 205 | 63.609 | 81.088 | -3.401 | 1.00 | 56.15 | A |
| ATOM | 1271 | CD2 | LEU | A | 205 | 64.356 | 81.877 | -5.647 | 1.00 | 56.15 | A |
| ATOM | 1272 | C | LEU | A | 205 | 61.288 | 84.938 | -5.497 | 1.00 | 60.17 | A |
| ATOM | 1273 | O | LEU | A | 205 | 60.926 | 85.732 | -4.631 | 1.00 | 60.17 | A |
| ATOM | 1274 | N | SER | A | 206 | 60.538 | 84.630 | -6.542 | 1.00 | 52.14 | A |
| ATOM | 1275 | CA | SER | A | 206 | 59.224 | 85.220 | -6.699 | 1.00 | 52.14 | A |
| ATOM | 1276 | CB | SER | A | 206 | 58.699 | 84.983 | -8.111 | 1.00 | 64.56 | A |
| ATOM | 1277 | OG | SER | A | 206 | 58.375 | 83.620 | -8.289 | 1.00 | 64.56 | A |
| ATOM | 1278 | C | SER | A | 206 | 58.304 | 84.547 | -5.703 | 1.00 | 52.14 | A |
| ATOM | 1279 | O | SER | A | 206 | 58.417 | 83.347 | -5.478 | 1.00 | 52.14 | A |
| ATOM | 1280 | N | GLN | A | 207 | 57.403 | 85.313 | -5.098 | 1.00 | 49.60 | A |
| ATOM | 1281 | CA | GLN | A | 207 | 56.480 | 84.735 | -4.140 | 1.00 | 49.60 | A |
| ATOM | 1282 | CB | GLN | A | 207 | 55.469 | 85.778 | -3.672 | 1.00 | 67.09 | A |
| ATOM | 1283 | CG | GLN | A | 207 | 54.576 | 85.282 | -2.555 | 1.00 | 67.09 | A |
| ATOM | 1284 | CD | GLN | A | 207 | 53.616 | 86.342 | -2.048 | 1.00 | 67.09 | A |
| ATOM | 1285 | OE1 | GLN | A | 207 | 54.011 | 87.481 | -1.775 | 1.00 | 67.09 | A |
| ATOM | 1286 | NE2 | GLN | A | 207 | 52.347 | 85.967 | -1.902 | 1.00 | 67.09 | A |
| ATOM | 1287 | C | GLN | A | 207 | 55.776 | 83.624 | -4.891 | 1.00 | 49.60 | A |
| ATOM | 1288 | O | GLN | A | 207 | 55.557 | 82.535 | -4.360 | 1.00 | 49.60 | A |
| ATOM | 1289 | N | SER | A | 208 | 55.454 | 83.923 | -6.148 | 1.00 | 75.26 | A |
| ATOM | 1290 | CA | SER | A | 208 | 54.782 | 83.006 | -7.063 | 1.00 | 75.26 | A |
| ATOM | 1291 | CB | SER | A | 208 | 55.814 | 82.218 | -7.864 | 1.00 | 58.83 | A |
| ATOM | 1292 | OG | SER | A | 208 | 55.178 | 81.248 | -8.676 | 1.00 | 58.83 | A |
| ATOM | 1293 | C | SER | A | 208 | 53.811 | 82.041 | -6.405 | 1.00 | 75.26 | A |
| ATOM | 1294 | O | SER | A | 208 | 54.081 | 80.825 | -6.461 | 1.00 | 75.26 | A |
| ATOM | 1295 | OXT | SER | A | 208 | 52.792 | 82.513 | -5.855 | 1.00 | 58.83 | A |
| ATOM | 1296 | CB | VAL | B | 51 | 30.891 | 119.792 | 62.005 | 1.00 | 100.00 | B |
| ATOM | 1297 | CG1 | VAL | B | 51 | 30.919 | 120.511 | 63.353 | 1.00 | 100.00 | B |
| ATOM | 1298 | CG2 | VAL | B | 51 | 32.285 | 119.318 | 61.613 | 1.00 | 100.00 | B |
| ATOM | 1299 | C | VAL | B | 51 | 30.374 | 117.548 | 63.085 | 1.00 | 100.00 | B |
| ATOM | 1300 | O | VAL | B | 51 | 30.018 | 117.621 | 64.265 | 1.00 | 100.00 | B |
| ATOM | 1301 | N | VAL | B | 51 | 28.515 | 119.051 | 62.370 | 1.00 | 100.00 | B |
| ATOM | 1302 | CA | VAL | B | 51 | 29.898 | 118.583 | 62.054 | 1.00 | 100.00 | B |
| ATOM | 1303 | N | THR | B | 52 | 31.164 | 116.577 | 62.628 | 1.00 | 100.00 | B |
| ATOM | 1512 | CG2 | ILE | B | 76 | 42.353 | 94.390 | 71.153 | 1.00 | 81.55 | B |
| ATOM | 1513 | CG1 | ILE | B | 76 | 44.350 | 95.309 | 69.924 | 1.00 | 81.55 | B |
| ATOM | 1514 | CD1 | ILE | B | 76 | 45.314 | 94.866 | 70.993 | 1.00 | 81.55 | B |
| ATOM | 1515 | C | ILE | B | 76 | 42.079 | 92.360 | 68.937 | 1.00 | 71.00 | B |
| ATOM | 1516 | O | ILE | B | 76 | 41.192 | 92.995 | 68.361 | 1.00 | 71.00 | B |
| ATOM | 1517 | N | PHE | B | 77 | 41.960 | 91.074 | 69.252 | 1.00 | 91.71 | B |
| ATOM | 1518 | CA | PHE | B | 77 | 40.732 | 90.343 | 68.956 | 1.00 | 91.71 | B |
| ATOM | 1519 | CB | PHE | B | 77 | 41.006 | 88.848 | 68.783 | 1.00 | 99.97 | B |
| ATOM | 1520 | CG | PHE | B | 77 | 41.620 | 88.488 | 67.465 | 1.00 | 99.97 | B |
| ATOM | 1521 | CD1 | PHE | B | 77 | 42.966 | 88.730 | 67.219 | 1.00 | 99.97 | B |
| ATOM | 1522 | CD2 | PHE | B | 77 | 40.849 | 87.893 | 66.469 | 1.00 | 99.97 | B |
| ATOM | 1523 | CE1 | PHE | B | 77 | 43.541 | 88.380 | 65.999 | 1.00 | 99.97 | B |
| ATOM | 1524 | CE2 | PHE | B | 77 | 41.413 | 87.540 | 65.245 | 1.00 | 99.97 | B |
| ATOM | 1525 | CZ | PHE | B | 77 | 42.763 | 87.784 | 65.010 | 1.00 | 99.97 | B |
| ATOM | 1526 | C | PHE | B | 77 | 39.726 | 90.527 | 70.080 | 1.00 | 91.71 | B |
| ATOM | 1527 | O | PHE | B | 77 | 40.103 | 90.650 | 71.247 | 1.00 | 91.71 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|--------|--------|------|--------|---|
| ATOM | 1528 | N | PRO | B | 78 | 38.428 | 90.553 | 69.743 | 1.00 | 97.35 | B |
| ATOM | 1529 | CD | PRO | B | 78 | 37.844 | 90.388 | 68.401 | 1.00 | 87.91 | B |
| ATOM | 1530 | CA | PRO | B | 78 | 37.384 | 90.720 | 70.760 | 1.00 | 97.35 | B |
| ATOM | 1531 | CB | PRO | B | 78 | 36.101 | 90.788 | 69.931 | 1.00 | 87.91 | B |
| ATOM | 1532 | CG | PRO | B | 78 | 36.434 | 89.960 | 68.723 | 1.00 | 87.91 | B |
| ATOM | 1533 | C | PRO | B | 78 | 37.412 | 89.536 | 71.726 | 1.00 | 97.35 | B |
| ATOM | 1534 | O | PRO | B | 78 | 36.866 | 89.599 | 72.829 | 1.00 | 97.35 | B |
| ATOM | 1535 | N | ASN | B | 79 | 38.069 | 88.462 | 71.292 | 1.00 | 99.95 | B |
| ATOM | 1536 | CA | ASN | B | 79 | 38.216 | 87.257 | 72.098 | 1.00 | 99.95 | B |
| ATOM | 1537 | CB | ASN | B | 79 | 38.734 | 86.090 | 71.240 | 1.00 | 100.00 | B |
| ATOM | 1538 | CG | ASN | B | 79 | 37.862 | 85.815 | 70.015 | 1.00 | 100.00 | B |
| ATOM | 1539 | OD1 | ASN | B | 79 | 36.646 | 85.635 | 70.135 | 1.00 | 100.00 | B |
| ATOM | 1540 | ND2 | ASN | B | 79 | 38.484 | 85.773 | 68.836 | 1.00 | 100.00 | B |
| ATOM | 1541 | C | ASN | B | 79 | 39.239 | 87.568 | 73.190 | 1.00 | 99.95 | B |
| ATOM | 1542 | O | ASN | B | 79 | 39.675 | 86.674 | 73.915 | 1.00 | 99.95 | B |
| ATOM | 1543 | N | GLY | B | 80 | 39.620 | 88.840 | 73.293 | 1.00 | 89.15 | B |
| ATOM | 1544 | CA | GLY | B | 80 | 40.602 | 89.254 | 74.283 | 1.00 | 89.15 | B |
| ATOM | 1545 | C | GLY | B | 80 | 41.982 | 88.710 | 73.954 | 1.00 | 89.15 | B |
| ATOM | 1546 | O | GLY | B | 80 | 42.917 | 88.813 | 74.754 | 1.00 | 89.15 | B |
| ATOM | 1547 | N | THR | B | 81 | 42.109 | 88.135 | 72.761 | 1.00 | 99.99 | B |
| ATOM | 1548 | CA | THR | B | 81 | 43.369 | 87.551 | 72.314 | 1.00 | 99.99 | B |
| ATOM | 1549 | CB | THR | B | 81 | 43.131 | 86.446 | 71.271 | 1.00 | 78.16 | B |
| ATOM | 1550 | OG1 | THR | B | 81 | 41.905 | 85.760 | 71.560 | 1.00 | 78.16 | B |
| ATOM | 1551 | CG2 | THR | B | 81 | 44.288 | 85.454 | 71.292 | 1.00 | 78.16 | B |
| ATOM | 1552 | C | THR | B | 81 | 44.297 | 88.582 | 71.684 | 1.00 | 99.99 | B |
| ATOM | 1553 | O | THR | B | 81 | 43.849 | 89.586 | 71.127 | 1.00 | 99.99 | B |
| ATOM | 1554 | N | ILE | B | 82 | 45.595 | 88.318 | 71.772 | 1.00 | 86.29 | B |
| ATOM | 1555 | CA | ILE | B | 82 | 46.605 | 89.197 | 71.200 | 1.00 | 86.29 | B |
| ATOM | 1556 | CB | ILE | B | 82 | 47.455 | 89.883 | 72.299 | 1.00 | 88.37 | B |
| ATOM | 1557 | CG2 | ILE | B | 82 | 48.489 | 90.800 | 71.661 | 1.00 | 88.37 | B |
| ATOM | 1558 | CG1 | ILE | B | 82 | 46.551 | 90.676 | 73.249 | 1.00 | 88.37 | B |
| ATOM | 1559 | CD1 | ILE | B | 82 | 45.752 | 91.770 | 72.581 | 1.00 | 88.37 | B |
| ATOM | 1560 | C | ILE | B | 82 | 47.526 | 88.362 | 70.313 | 1.00 | 86.29 | B |
| ATOM | 1561 | O | ILE | B | 82 | 47.945 | 87.264 | 70.688 | 1.00 | 86.29 | B |
| ATOM | 1562 | N | GLN | B | 83 | 47.832 | 88.884 | 69.131 | 1.00 | 100.00 | B |
| ATOM | 1563 | CA | GLN | B | 83 | 48.696 | 88.180 | 68.193 | 1.00 | 100.00 | B |
| ATOM | 1564 | CB | GLN | B | 83 | 47.939 | 87.010 | 67.565 | 1.00 | 100.00 | B |
| ATOM | 1565 | CG | GLN | B | 83 | 46.683 | 87.429 | 66.814 | 1.00 | 100.00 | B |
| ATOM | 1566 | CD | GLN | B | 83 | 45.976 | 86.257 | 66.155 | 1.00 | 100.00 | B |
| ATOM | 1567 | OE1 | GLN | B | 83 | 45.524 | 85.330 | 66.831 | 1.00 | 100.00 | B |
| ATOM | 1568 | NE2 | GLN | B | 83 | 45.877 | 86.294 | 64.827 | 1.00 | 100.00 | B |
| ATOM | 1569 | C | GLN | B | 83 | 49.176 | 89.126 | 67.100 | 1.00 | 100.00 | B |
| ATOM | 1570 | O | GLN | B | 83 | 49.040 | 90.344 | 67.216 | 1.00 | 100.00 | B |
| ATOM | 1571 | N | GLY | B | 84 | 49.734 | 88.557 | 66.036 | 1.00 | 100.00 | B |
| ATOM | 1572 | CA | GLY | B | 84 | 50.225 | 89.370 | 64.941 | 1.00 | 100.00 | B |
| ATOM | 1573 | C | GLY | B | 84 | 50.198 | 88.651 | 63.608 | 1.00 | 100.00 | B |
| ATOM | 1574 | O | GLY | B | 84 | 50.378 | 87.435 | 63.543 | 1.00 | 100.00 | B |
| ATOM | 1575 | N | THR | B | 85 | 49.969 | 89.409 | 62.542 | 1.00 | 100.00 | B |
| ATOM | 1576 | CA | THR | B | 85 | 49.924 | 88.850 | 61.197 | 1.00 | 100.00 | B |
| ATOM | 1577 | CB | THR | B | 85 | 48.473 | 88.719 | 60.687 | 1.00 | 91.32 | B |
| ATOM | 1578 | OG1 | THR | B | 85 | 47.879 | 90.020 | 60.586 | 1.00 | 91.32 | B |
| ATOM | 1579 | CG2 | THR | B | 85 | 47.653 | 87.862 | 61.635 | 1.00 | 91.32 | B |
| ATOM | 1580 | C | THR | B | 85 | 50.681 | 89.753 | 60.234 | 1.00 | 100.00 | B |
| ATOM | 1581 | O | THR | B | 85 | 50.908 | 90.930 | 60.523 | 1.00 | 100.00 | B |
| ATOM | 1582 | N | ARG | B | 86 | 51.082 | 89.196 | 59.095 | 1.00 | 97.48 | B |
| ATOM | 1583 | CA | ARG | B | 86 | 51.786 | 89.971 | 58.084 | 1.00 | 97.48 | B |
| ATOM | 1584 | CB | ARG | B | 86 | 52.687 | 89.066 | 57.238 | 1.00 | 100.00 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|---------|--------|------|--------|---|
| ATOM | 1585 | CG | ARG | B | 86 | 53.901 | 88.526 | 57.986 | 1.00 | 100.00 | B |
| ATOM | 1586 | CD | ARG | B | 86 | 54.915 | 87.914 | 57.026 | 1.00 | 100.00 | B |
| ATOM | 1587 | NE | ARG | B | 86 | 56.186 | 87.594 | 57.675 | 1.00 | 100.00 | B |
| ATOM | 1588 | CZ | ARG | B | 86 | 56.372 | 86.585 | 58.524 | 1.00 | 100.00 | B |
| ATOM | 1589 | NH1 | ARG | B | 86 | 55.366 | 85.778 | 58.839 | 1.00 | 100.00 | B |
| ATOM | 1590 | NH2 | ARG | B | 86 | 57.569 | 86.382 | 59.060 | 1.00 | 100.00 | B |
| ATOM | 1591 | C | ARG | B | 86 | 50.726 | 90.633 | 57.214 | 1.00 | 97.48 | B |
| ATOM | 1592 | O | ARG | B | 86 | 51.035 | 91.385 | 56.291 | 1.00 | 97.48 | B |
| ATOM | 1593 | N | LYS | B | 87 | 49.469 | 90.341 | 57.534 | 1.00 | 81.65 | B |
| ATOM | 1594 | CA | LYS | B | 87 | 48.326 | 90.893 | 56.821 | 1.00 | 81.65 | B |
| ATOM | 1595 | CB | LYS | B | 87 | 47.032 | 90.260 | 57.340 | 1.00 | 99.90 | B |
| ATOM | 1596 | CG | LYS | B | 87 | 47.053 | 88.734 | 57.419 | 1.00 | 99.90 | B |
| ATOM | 1597 | CD | LYS | B | 87 | 45.766 | 88.194 | 58.057 | 1.00 | 99.90 | B |
| ATOM | 1598 | CE | LYS | B | 87 | 45.718 | 86.659 | 58.095 | 1.00 | 99.90 | B |
| ATOM | 1599 | NZ | LYS | B | 87 | 46.750 | 86.049 | 58.985 | 1.00 | 99.90 | B |
| ATOM | 1600 | C | LYS | B | 87 | 48.280 | 92.405 | 57.051 | 1.00 | 81.65 | B |
| ATOM | 1601 | O | LYS | B | 87 | 48.296 | 92.864 | 58.194 | 1.00 | 81.65 | B |
| ATOM | 1602 | N | ASP | B | 88 | 48.235 | 93.173 | 55.967 | 1.00 | 86.01 | B |
| ATOM | 1603 | CA | ASP | B | 88 | 48.177 | 94.629 | 56.056 | 1.00 | 86.01 | B |
| ATOM | 1604 | CB | ASP | B | 88 | 48.827 | 95.265 | 54.827 | 1.00 | 72.38 | B |
| ATOM | 1605 | CG | ASP | B | 88 | 48.752 | 96.785 | 54.842 | 1.00 | 72.38 | B |
| ATOM | 1606 | OD1 | ASP | B | 88 | 49.424 | 97.414 | 55.688 | 1.00 | 72.38 | B |
| ATOM | 1607 | OD2 | ASP | B | 88 | 48.019 | 97.351 | 54.003 | 1.00 | 72.38 | B |
| ATOM | 1608 | C | ASP | B | 88 | 46.718 | 95.045 | 56.132 | 1.00 | 86.01 | B |
| ATOM | 1609 | O | ASP | B | 88 | 45.882 | 94.526 | 55.392 | 1.00 | 86.01 | B |
| ATOM | 1610 | N | HIS | B | 89 | 46.418 | 95.982 | 57.026 | 1.00 | 76.41 | B |
| ATOM | 1611 | CA | HIS | B | 89 | 45.055 | 96.468 | 57.215 | 1.00 | 76.41 | B |
| ATOM | 1612 | CB | HIS | B | 89 | 44.511 | 97.075 | 55.923 | 1.00 | 73.52 | B |
| ATOM | 1613 | CG | HIS | B | 89 | 44.993 | 98.465 | 55.668 | 1.00 | 73.52 | B |
| ATOM | 1614 | CD2 | HIS | B | 89 | 44.362 | 99.658 | 55.768 | 1.00 | 73.52 | B |
| ATOM | 1615 | ND1 | HIS | B | 89 | 46.288 | 98.745 | 55.291 | 1.00 | 73.52 | B |
| ATOM | 1616 | CE1 | HIS | B | 89 | 46.434 | 100.052 | 55.170 | 1.00 | 73.52 | B |
| ATOM | 1617 | NE2 | HIS | B | 89 | 45.280 | 100.629 | 55.454 | 1.00 | 73.52 | B |
| ATOM | 1618 | C | HIS | B | 89 | 44.089 | 95.401 | 57.708 | 1.00 | 76.41 | B |
| ATOM | 1619 | O | HIS | B | 89 | 42.966 | 95.297 | 57.211 | 1.00 | 76.41 | B |
| ATOM | 1620 | N | SER | B | 90 | 44.526 | 94.619 | 58.691 | 1.00 | 98.90 | B |
| ATOM | 1621 | CA | SER | B | 90 | 43.694 | 93.568 | 59.267 | 1.00 | 98.90 | B |
| ATOM | 1622 | CB | SER | B | 90 | 44.531 | 92.682 | 60.185 | 1.00 | 100.00 | B |
| ATOM | 1623 | OG | SER | B | 90 | 45.798 | 92.419 | 59.611 | 1.00 | 100.00 | B |
| ATOM | 1624 | C | SER | B | 90 | 42.581 | 94.220 | 60.080 | 1.00 | 98.90 | B |
| ATOM | 1625 | O | SER | B | 90 | 42.795 | 95.247 | 60.726 | 1.00 | 98.90 | B |
| ATOM | 1626 | N | ARG | B | 91 | 41.396 | 93.625 | 60.054 | 1.00 | 99.53 | B |
| ATOM | 1627 | CA | ARG | B | 91 | 40.263 | 94.167 | 60.797 | 1.00 | 99.53 | B |
| ATOM | 1628 | CB | ARG | B | 91 | 39.082 | 93.196 | 60.716 | 1.00 | 100.00 | B |
| ATOM | 1629 | CG | ARG | B | 91 | 38.738 | 92.791 | 59.291 | 1.00 | 100.00 | B |
| ATOM | 1630 | CD | ARG | B | 91 | 37.795 | 91.598 | 59.248 | 1.00 | 100.00 | B |
| ATOM | 1631 | NE | ARG | B | 91 | 37.910 | 90.876 | 57.982 | 1.00 | 100.00 | B |
| ATOM | 1632 | CZ | ARG | B | 91 | 39.043 | 90.345 | 57.525 | 1.00 | 100.00 | B |
| ATOM | 1633 | NH1 | ARG | B | 91 | 40.166 | 90.453 | 58.225 | 1.00 | 100.00 | B |
| ATOM | 1634 | NH2 | ARG | B | 91 | 39.053 | 89.700 | 56.366 | 1.00 | 100.00 | B |
| ATOM | 1635 | C | ARG | B | 91 | 40.622 | 94.424 | 62.262 | 1.00 | 99.53 | B |
| ATOM | 1636 | O | ARG | B | 91 | 40.234 | 95.441 | 62.838 | 1.00 | 99.53 | B |
| ATOM | 1637 | N | PHE | B | 92 | 41.378 | 93.504 | 62.853 | 1.00 | 81.44 | B |
| ATOM | 1638 | CA | PHE | B | 92 | 41.771 | 93.612 | 64.253 | 1.00 | 81.44 | B |
| ATOM | 1639 | CB | PHE | B | 92 | 41.654 | 92.238 | 64.912 | 1.00 | 92.47 | B |
| ATOM | 1640 | CG | PHE | B | 92 | 40.319 | 91.590 | 64.699 | 1.00 | 92.47 | B |
| ATOM | 1641 | CD1 | PHE | B | 92 | 39.187 | 92.070 | 65.350 | 1.00 | 92.47 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|---------|--------|------|-------|---|
| ATOM | 1642 | CD2 | PHE | B | 92 | 40.180 | 90.537 | 63.801 | 1.00 | 92.47 | B |
| ATOM | 1643 | CE1 | PHE | B | 92 | 37.934 | 91.513 | 65.106 | 1.00 | 92.47 | B |
| ATOM | 1644 | CE2 | PHE | B | 92 | 38.932 | 89.974 | 63.550 | 1.00 | 92.47 | B |
| ATOM | 1645 | CZ | PHE | B | 92 | 37.807 | 90.464 | 64.204 | 1.00 | 92.47 | B |
| ATOM | 1646 | C | PHE | B | 92 | 43.176 | 94.171 | 64.444 | 1.00 | 81.44 | B |
| ATOM | 1647 | O | PHE | B | 92 | 43.727 | 94.123 | 65.545 | 1.00 | 81.44 | B |
| ATOM | 1648 | N | GLY | B | 93 | 43.750 | 94.701 | 63.369 | 1.00 | 64.94 | B |
| ATOM | 1649 | CA | GLY | B | 93 | 45.084 | 95.276 | 63.441 | 1.00 | 64.94 | B |
| ATOM | 1650 | C | GLY | B | 93 | 45.008 | 96.790 | 63.383 | 1.00 | 64.94 | B |
| ATOM | 1651 | O | GLY | B | 93 | 46.012 | 97.488 | 63.533 | 1.00 | 64.94 | B |
| ATOM | 1652 | N | ILE | B | 94 | 43.799 | 97.292 | 63.153 | 1.00 | 65.52 | B |
| ATOM | 1653 | CA | ILE | B | 94 | 43.547 | 98.723 | 63.087 | 1.00 | 65.52 | B |
| ATOM | 1654 | CB | ILE | B | 94 | 42.281 | 99.019 | 62.275 | 1.00 | 52.14 | B |
| ATOM | 1655 | CG2 | ILE | B | 94 | 42.051 | 100.520 | 62.197 | 1.00 | 52.14 | B |
| ATOM | 1656 | CG1 | ILE | B | 94 | 42.414 | 98.420 | 60.876 | 1.00 | 52.14 | B |
| ATOM | 1657 | CD1 | ILE | B | 94 | 43.591 | 98.947 | 60.092 | 1.00 | 52.14 | B |
| ATOM | 1658 | C | ILE | B | 94 | 43.346 | 99.202 | 64.518 | 1.00 | 65.52 | B |
| ATOM | 1659 | O | ILE | B | 94 | 42.261 | 99.070 | 65.082 | 1.00 | 65.52 | B |
| ATOM | 1660 | N | LEU | B | 95 | 44.408 | 99.750 | 65.096 | 1.00 | 74.57 | B |
| ATOM | 1661 | CA | LEU | B | 95 | 44.388 | 100.229 | 66.471 | 1.00 | 74.57 | B |
| ATOM | 1662 | CB | LEU | B | 95 | 45.656 | 99.768 | 67.183 | 1.00 | 54.82 | B |
| ATOM | 1663 | CG | LEU | B | 95 | 46.096 | 98.352 | 66.799 | 1.00 | 54.82 | B |
| ATOM | 1664 | CD1 | LEU | B | 95 | 47.388 | 98.006 | 67.504 | 1.00 | 54.82 | B |
| ATOM | 1665 | CD2 | LEU | B | 95 | 44.998 | 97.362 | 67.155 | 1.00 | 54.82 | B |
| ATOM | 1666 | C | LEU | B | 95 | 44.300 | 101.744 | 66.536 | 1.00 | 74.57 | B |
| ATOM | 1667 | O | LEU | B | 95 | 44.636 | 102.433 | 65.580 | 1.00 | 74.57 | B |
| ATOM | 1668 | N | GLU | B | 96 | 43.844 | 102.259 | 67.671 | 1.00 | 77.91 | B |
| ATOM | 1669 | CA | GLU | B | 96 | 43.727 | 103.697 | 67.860 | 1.00 | 77.91 | B |
| ATOM | 1670 | CB | GLU | B | 96 | 42.279 | 104.090 | 68.133 | 1.00 | 80.12 | B |
| ATOM | 1671 | CG | GLU | B | 96 | 42.109 | 105.569 | 68.393 | 1.00 | 80.12 | B |
| ATOM | 1672 | CD | GLU | B | 96 | 40.659 | 105.978 | 68.523 | 1.00 | 80.12 | B |
| ATOM | 1673 | OE1 | GLU | B | 96 | 39.892 | 105.782 | 67.551 | 1.00 | 80.12 | B |
| ATOM | 1674 | OE2 | GLU | B | 96 | 40.292 | 106.501 | 69.598 | 1.00 | 80.12 | B |
| ATOM | 1675 | C | GLU | B | 96 | 44.592 | 104.115 | 69.030 | 1.00 | 77.91 | B |
| ATOM | 1676 | O | GLU | B | 96 | 44.395 | 103.651 | 70.149 | 1.00 | 77.91 | B |
| ATOM | 1677 | N | PHE | B | 97 | 45.558 | 104.988 | 68.773 | 1.00 | 61.79 | B |
| ATOM | 1678 | CA | PHE | B | 97 | 46.438 | 105.440 | 69.832 | 1.00 | 61.79 | B |
| ATOM | 1679 | CB | PHE | B | 97 | 47.780 | 105.877 | 69.252 | 1.00 | 54.42 | B |
| ATOM | 1680 | CG | PHE | B | 97 | 48.743 | 104.746 | 69.059 | 1.00 | 54.42 | B |
| ATOM | 1681 | CD1 | PHE | B | 97 | 48.385 | 103.631 | 68.307 | 1.00 | 54.42 | B |
| ATOM | 1682 | CD2 | PHE | B | 97 | 50.009 | 104.792 | 69.633 | 1.00 | 54.42 | B |
| ATOM | 1683 | CE1 | PHE | B | 97 | 49.274 | 102.570 | 68.129 | 1.00 | 54.42 | B |
| ATOM | 1684 | CE2 | PHE | B | 97 | 50.914 | 103.738 | 69.466 | 1.00 | 54.42 | B |
| ATOM | 1685 | CZ | PHE | B | 97 | 50.546 | 102.624 | 68.710 | 1.00 | 54.42 | B |
| ATOM | 1686 | C | PHE | B | 97 | 45.831 | 106.552 | 70.672 | 1.00 | 61.79 | B |
| ATOM | 1687 | O | PHE | B | 97 | 45.244 | 107.503 | 70.154 | 1.00 | 61.79 | B |
| ATOM | 1688 | N | ILE | B | 98 | 45.976 | 106.402 | 71.983 | 1.00 | 69.37 | B |
| ATOM | 1689 | CA | ILE | B | 98 | 45.454 | 107.354 | 72.947 | 1.00 | 69.37 | B |
| ATOM | 1690 | CB | ILE | B | 98 | 44.478 | 106.669 | 73.923 | 1.00 | 53.98 | B |
| ATOM | 1691 | CG2 | ILE | B | 98 | 43.824 | 107.704 | 74.821 | 1.00 | 53.98 | B |
| ATOM | 1692 | CG1 | ILE | B | 98 | 43.409 | 105.909 | 73.141 | 1.00 | 53.98 | B |
| ATOM | 1693 | CD1 | ILE | B | 98 | 42.536 | 105.039 | 74.009 | 1.00 | 53.98 | B |
| ATOM | 1694 | C | ILE | B | 98 | 46.607 | 107.913 | 73.760 | 1.00 | 69.37 | B |
| ATOM | 1695 | O | ILE | B | 98 | 47.311 | 107.164 | 74.438 | 1.00 | 69.37 | B |
| ATOM | 1696 | N | SER | B | 99 | 46.813 | 109.222 | 73.687 | 1.00 | 55.09 | B |
| ATOM | 1697 | CA | SER | B | 99 | 47.881 | 109.847 | 74.459 | 1.00 | 55.09 | B |
| ATOM | 1698 | CB | SER | B | 99 | 48.316 | 111.161 | 73.807 | 1.00 | 87.73 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 1699 | OG | SER | B | 99 | 47.195 | 111.921 | 73.402 | 1.00 | 87.73 | B |
| ATOM | 1700 | C | SER | B | 99 | 47.382 | 110.089 | 75.887 | 1.00 | 55.09 | B |
| ATOM | 1701 | O | SER | B | 99 | 46.497 | 110.908 | 76.125 | 1.00 | 55.09 | B |
| ATOM | 1702 | N | ILE | B | 100 | 47.944 | 109.343 | 76.830 | 1.00 | 76.85 | B |
| ATOM | 1703 | CA | ILE | B | 100 | 47.557 | 109.468 | 78.226 | 1.00 | 76.85 | B |
| ATOM | 1704 | CB | ILE | B | 100 | 47.975 | 108.213 | 79.029 | 1.00 | 65.94 | B |
| ATOM | 1705 | CG2 | ILE | B | 100 | 47.392 | 108.272 | 80.436 | 1.00 | 65.94 | B |
| ATOM | 1706 | CG1 | ILE | B | 100 | 47.481 | 106.952 | 78.318 | 1.00 | 65.94 | B |
| ATOM | 1707 | CD1 | ILE | B | 100 | 45.974 | 106.863 | 78.196 | 1.00 | 65.94 | B |
| ATOM | 1708 | C | ILE | B | 100 | 48.252 | 110.689 | 78.812 | 1.00 | 76.85 | B |
| ATOM | 1709 | O | ILE | B | 100 | 47.659 | 111.458 | 79.568 | 1.00 | 76.85 | B |
| ATOM | 1710 | N | ALA | B | 101 | 49.515 | 110.859 | 78.442 | 1.00 | 62.70 | B |
| ATOM | 1711 | CA | ALA | B | 101 | 50.324 | 111.973 | 78.914 | 1.00 | 62.70 | B |
| ATOM | 1712 | CB | ALA | B | 101 | 50.451 | 111.919 | 80.432 | 1.00 | 82.58 | B |
| ATOM | 1713 | C | ALA | B | 101 | 51.703 | 111.892 | 78.268 | 1.00 | 62.70 | B |
| ATOM | 1714 | O | ALA | B | 101 | 52.020 | 110.921 | 77.584 | 1.00 | 62.70 | B |
| ATOM | 1715 | N | VAL | B | 102 | 52.523 | 112.910 | 78.486 | 1.00 | 69.95 | B |
| ATOM | 1716 | CA | VAL | B | 102 | 53.856 | 112.924 | 77.909 | 1.00 | 69.95 | B |
| ATOM | 1717 | CB | VAL | B | 102 | 54.732 | 114.016 | 78.560 | 1.00 | 67.80 | B |
| ATOM | 1718 | CG1 | VAL | B | 102 | 56.099 | 114.054 | 77.894 | 1.00 | 67.80 | B |
| ATOM | 1719 | CG2 | VAL | B | 102 | 54.046 | 115.369 | 78.439 | 1.00 | 67.80 | B |
| ATOM | 1720 | C | VAL | B | 102 | 54.535 | 111.567 | 78.086 | 1.00 | 69.95 | B |
| ATOM | 1721 | O | VAL | B | 102 | 54.737 | 111.104 | 79.211 | 1.00 | 69.95 | B |
| ATOM | 1722 | N | GLY | B | 103 | 54.861 | 110.927 | 76.965 | 1.00 | 62.47 | B |
| ATOM | 1723 | CA | GLY | B | 103 | 55.535 | 109.638 | 77.000 | 1.00 | 62.47 | B |
| ATOM | 1724 | C | GLY | B | 103 | 54.697 | 108.404 | 77.296 | 1.00 | 62.47 | B |
| ATOM | 1725 | O | GLY | B | 103 | 55.207 | 107.287 | 77.233 | 1.00 | 62.47 | B |
| ATOM | 1726 | N | LEU | B | 104 | 53.421 | 108.587 | 77.617 | 1.00 | 62.72 | B |
| ATOM | 1727 | CA | LEU | B | 104 | 52.559 | 107.451 | 77.925 | 1.00 | 62.72 | B |
| ATOM | 1728 | CB | LEU | B | 104 | 52.017 | 107.569 | 79.355 | 1.00 | 60.54 | B |
| ATOM | 1729 | CG | LEU | B | 104 | 53.102 | 107.562 | 80.438 | 1.00 | 60.54 | B |
| ATOM | 1730 | CD1 | LEU | B | 104 | 52.483 | 107.827 | 81.793 | 1.00 | 60.54 | B |
| ATOM | 1731 | CD2 | LEU | B | 104 | 53.826 | 106.225 | 80.432 | 1.00 | 60.54 | B |
| ATOM | 1732 | C | LEU | B | 104 | 51.410 | 107.336 | 76.938 | 1.00 | 62.72 | B |
| ATOM | 1733 | O | LEU | B | 104 | 50.793 | 108.337 | 76.558 | 1.00 | 62.72 | B |
| ATOM | 1734 | N | VAL | B | 105 | 51.112 | 106.104 | 76.540 | 1.00 | 67.82 | B |
| ATOM | 1735 | CA | VAL | B | 105 | 50.055 | 105.864 | 75.572 | 1.00 | 67.82 | B |
| ATOM | 1736 | CB | VAL | B | 105 | 50.661 | 105.726 | 74.153 | 1.00 | 78.87 | B |
| ATOM | 1737 | CG1 | VAL | B | 105 | 51.563 | 104.501 | 74.089 | 1.00 | 78.87 | B |
| ATOM | 1738 | CG2 | VAL | B | 105 | 49.562 | 105.635 | 73.118 | 1.00 | 78.87 | B |
| ATOM | 1739 | C | VAL | B | 105 | 49.219 | 104.621 | 75.861 | 1.00 | 67.82 | B |
| ATOM | 1740 | O | VAL | B | 105 | 49.635 | 103.728 | 76.596 | 1.00 | 67.82 | B |
| ATOM | 1741 | N | SER | B | 106 | 48.028 | 104.586 | 75.276 | 1.00 | 62.22 | B |
| ATOM | 1742 | CA | SER | B | 106 | 47.127 | 103.456 | 75.413 | 1.00 | 62.22 | B |
| ATOM | 1743 | CB | SER | B | 106 | 45.952 | 103.799 | 76.334 | 1.00 | 66.55 | B |
| ATOM | 1744 | OG | SER | B | 106 | 46.351 | 103.757 | 77.693 | 1.00 | 66.55 | B |
| ATOM | 1745 | C | SER | B | 106 | 46.624 | 103.100 | 74.018 | 1.00 | 62.22 | B |
| ATOM | 1746 | O | SER | B | 106 | 46.182 | 103.969 | 73.267 | 1.00 | 62.22 | B |
| ATOM | 1747 | N | ILE | B | 107 | 46.699 | 101.820 | 73.676 | 1.00 | 71.03 | B |
| ATOM | 1748 | CA | ILE | B | 107 | 46.277 | 101.348 | 72.366 | 1.00 | 71.03 | B |
| ATOM | 1749 | CB | ILE | B | 107 | 47.350 | 100.424 | 71.774 | 1.00 | 50.09 | B |
| ATOM | 1750 | CG2 | ILE | B | 107 | 47.005 | 100.075 | 70.333 | 1.00 | 50.09 | B |
| ATOM | 1751 | CG1 | ILE | B | 107 | 48.707 | 101.129 | 71.841 | 1.00 | 50.09 | B |
| ATOM | 1752 | CD1 | ILE | B | 107 | 49.880 | 100.225 | 71.627 | 1.00 | 50.09 | B |
| ATOM | 1753 | C | ILE | B | 107 | 44.951 | 100.606 | 72.455 | 1.00 | 71.03 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 1754 | O | ILE | B | 107 | 44.796 | 99.703 | 73.268 | 1.00 | 71.03 | B |
| ATOM | 1755 | N | ARG | B | 108 | 44.000 | 100.990 | 71.612 | 1.00 | 67.11 | B |
| ATOM | 1756 | CA | ARG | B | 108 | 42.683 | 100.373 | 71.610 | 1.00 | 67.11 | B |
| ATOM | 1757 | CB | ARG | B | 108 | 41.640 | 101.387 | 72.083 | 1.00 | 90.58 | B |
| ATOM | 1758 | CG | ARG | B | 108 | 40.202 | 100.888 | 72.070 | 1.00 | 90.58 | B |
| ATOM | 1759 | CD | ARG | B | 108 | 39.249 | 102.023 | 72.410 | 1.00 | 90.58 | B |
| ATOM | 1760 | NE | ARG | B | 108 | 37.854 | 101.596 | 72.478 | 1.00 | 90.58 | B |
| ATOM | 1761 | CZ | ARG | B | 108 | 36.836 | 102.417 | 72.720 | 1.00 | 90.58 | B |
| ATOM | 1762 | NH1 | ARG | B | 108 | 37.057 | 103.712 | 72.919 | 1.00 | 90.58 | B |
| ATOM | 1763 | NH2 | ARG | B | 108 | 35.595 | 101.947 | 72.765 | 1.00 | 90.58 | B |
| ATOM | 1764 | C | ARG | B | 108 | 42.293 | 99.857 | 70.231 | 1.00 | 67.11 | B |
| ATOM | 1765 | O | ARG | B | 108 | 42.276 | 100.615 | 69.260 | 1.00 | 67.11 | B |
| ATOM | 1766 | N | GLY | B | 109 | 41.976 | 98.567 | 70.151 | 1.00 | 80.22 | B |
| ATOM | 1767 | CA | GLY | B | 109 | 41.570 | 97.988 | 68.884 | 1.00 | 80.22 | B |
| ATOM | 1768 | C | GLY | B | 109 | 40.281 | 98.641 | 68.423 | 1.00 | 80.22 | B |
| ATOM | 1769 | O | GLY | B | 109 | 39.260 | 98.554 | 69.097 | 1.00 | 80.22 | B |
| ATOM | 1770 | N | VAL | B | 110 | 40.326 | 99.308 | 67.278 | 1.00 | 75.17 | B |
| ATOM | 1771 | CA | VAL | B | 110 | 39.152 | 99.983 | 66.745 | 1.00 | 75.17 | B |
| ATOM | 1772 | CB | VAL | B | 110 | 39.466 | 100.640 | 65.381 | 1.00 | 54.92 | B |
| ATOM | 1773 | CG1 | VAL | B | 110 | 38.246 | 101.380 | 64.858 | 1.00 | 54.92 | B |
| ATOM | 1774 | CG2 | VAL | B | 110 | 40.635 | 101.598 | 65.532 | 1.00 | 54.92 | B |
| ATOM | 1775 | C | VAL | B | 110 | 37.977 | 99.030 | 66.570 | 1.00 | 75.17 | B |
| ATOM | 1776 | O | VAL | B | 110 | 36.832 | 99.388 | 66.838 | 1.00 | 75.17 | B |
| ATOM | 1777 | N | ASP | B | 111 | 38.262 | 97.811 | 66.126 | 1.00 | 88.28 | B |
| ATOM | 1778 | CA | ASP | B | 111 | 37.207 | 96.832 | 65.898 | 1.00 | 88.28 | B |
| ATOM | 1779 | CB | ASP | B | 111 | 37.692 | 95.765 | 64.915 | 1.00 | 99.99 | B |
| ATOM | 1780 | CG | ASP | B | 111 | 36.561 | 94.909 | 64.386 | 1.00 | 99.99 | B |
| ATOM | 1781 | OD1 | ASP | B | 111 | 36.843 | 93.879 | 63.739 | 1.00 | 99.99 | B |
| ATOM | 1782 | OD2 | ASP | B | 111 | 35.386 | 95.269 | 64.609 | 1.00 | 99.99 | B |
| ATOM | 1783 | C | ASP | B | 111 | 36.715 | 96.160 | 67.178 | 1.00 | 88.28 | B |
| ATOM | 1784 | O | ASP | B | 111 | 35.511 | 96.056 | 67.410 | 1.00 | 88.28 | B |
| ATOM | 1785 | N | SER | B | 112 | 37.648 | 95.708 | 68.007 | 1.00 | 74.39 | B |
| ATOM | 1786 | CA | SER | B | 112 | 37.299 | 95.031 | 69.249 | 1.00 | 74.39 | B |
| ATOM | 1787 | CB | SER | B | 112 | 38.474 | 94.166 | 69.717 | 1.00 | 72.09 | B |
| ATOM | 1788 | OG | SER | B | 112 | 39.561 | 94.964 | 70.147 | 1.00 | 72.09 | B |
| ATOM | 1789 | C | SER | B | 112 | 36.897 | 95.983 | 70.372 | 1.00 | 74.39 | B |
| ATOM | 1790 | O | SER | B | 112 | 36.195 | 95.592 | 71.304 | 1.00 | 74.39 | B |
| ATOM | 1791 | N | GLY | B | 113 | 37.343 | 97.230 | 70.285 | 1.00 | 83.88 | B |
| ATOM | 1792 | CA | GLY | B | 113 | 37.022 | 98.198 | 71.317 | 1.00 | 83.88 | B |
| ATOM | 1793 | C | GLY | B | 113 | 37.777 | 97.893 | 72.599 | 1.00 | 83.88 | B |
| ATOM | 1794 | O | GLY | B | 113 | 37.534 | 98.510 | 73.633 | 1.00 | 83.88 | B |
| ATOM | 1795 | N | LEU | B | 114 | 38.703 | 96.942 | 72.523 | 1.00 | 62.45 | B |
| ATOM | 1796 | CA | LEU | B | 114 | 39.496 | 96.536 | 73.679 | 1.00 | 62.45 | B |
| ATOM | 1797 | CB | LEU | B | 114 | 39.678 | 95.015 | 73.684 | 1.00 | 79.61 | B |
| ATOM | 1798 | CG | LEU | B | 114 | 38.432 | 94.133 | 73.635 | 1.00 | 79.61 | B |
| ATOM | 1799 | CD1 | LEU | B | 114 | 38.853 | 92.673 | 73.583 | 1.00 | 79.61 | B |
| ATOM | 1800 | CD2 | LEU | B | 114 | 37.561 | 94.406 | 74.849 | 1.00 | 79.61 | B |
| ATOM | 1801 | C | LEU | B | 114 | 40.873 | 97.189 | 73.724 | 1.00 | 62.45 | B |
| ATOM | 1802 | O | LEU | B | 114 | 41.572 | 97.274 | 72.714 | 1.00 | 62.45 | B |
| ATOM | 1803 | N | TYR | B | 115 | 41.268 | 97.633 | 74.908 | 1.00 | 69.80 | B |
| ATOM | 1804 | CA | TYR | B | 115 | 42.563 | 98.265 | 75.078 | 1.00 | 69.80 | B |
| ATOM | 1805 | CB | TYR | B | 115 | 42.538 | 99.217 | 76.283 | 1.00 | 74.19 | B |
| ATOM | 1806 | CG | TYR | B | 115 | 41.461 | 100.277 | 76.176 | 1.00 | 74.19 | B |
| ATOM | 1807 | CD1 | TYR | B | 115 | 40.118 | 99.958 | 76.388 | 1.00 | 74.19 | B |
| ATOM | 1808 | CE1 | TYR | B | 115 | 39.114 | 100.904 | 76.205 | 1.00 | 74.19 | B |
| ATOM | 1809 | CD2 | TYR | B | 115 | 41.771 | 101.578 | 75.784 | 1.00 | 74.19 | B |
| ATOM | 1810 | CE2 | TYR | B | 115 | 40.772 | 102.530 | 75.597 | 1.00 | 74.19 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 1811 | CZ | TYR | B | 115 | 39.448 | 102.183 | 75.806 | 1.00 | 74.19 | B |
| ATOM | 1812 | OH | TYR | B | 115 | 38.455 | 103.106 | 75.589 | 1.00 | 74.19 | B |
| ATOM | 1813 | C | TYR | B | 115 | 43.616 | 97.189 | 75.280 | 1.00 | 69.80 | B |
| ATOM | 1814 | O | TYR | B | 115 | 43.314 | 96.100 | 75.759 | 1.00 | 69.80 | B |
| ATOM | 1815 | N | LEU | B | 116 | 44.849 | 97.490 | 74.894 | 1.00 | 74.58 | B |
| ATOM | 1816 | CA | LEU | B | 116 | 45.941 | 96.549 | 75.055 | 1.00 | 74.58 | B |
| ATOM | 1817 | CB | LEU | B | 116 | 47.096 | 96.895 | 74.114 | 1.00 | 60.23 | B |
| ATOM | 1818 | CG | LEU | B | 116 | 48.362 | 96.057 | 74.344 | 1.00 | 60.23 | B |
| ATOM | 1819 | CD1 | LEU | B | 116 | 48.085 | 94.607 | 73.967 | 1.00 | 60.23 | B |
| ATOM | 1820 | CD2 | LEU | B | 116 | 49.520 | 96.605 | 73.529 | 1.00 | 60.23 | B |
| ATOM | 1821 | C | LEU | B | 116 | 46.431 | 96.609 | 76.493 | 1.00 | 74.58 | B |
| ATOM | 1822 | O | LEU | B | 116 | 46.829 | 97.672 | 76.978 | 1.00 | 74.58 | B |
| ATOM | 1823 | N | GLY | B | 117 | 46.403 | 95.465 | 77.170 | 1.00 | 91.27 | B |
| ATOM | 1824 | CA | GLY | B | 117 | 46.854 | 95.410 | 78.547 | 1.00 | 91.27 | B |
| ATOM | 1825 | C | GLY | B | 117 | 47.935 | 94.371 | 78.767 | 1.00 | 91.27 | B |
| ATOM | 1826 | O | GLY | B | 117 | 48.195 | 93.531 | 77.905 | 1.00 | 91.27 | B |
| ATOM | 1827 | N | MET | B | 118 | 48.575 | 94.439 | 79.927 | 1.00 | 96.23 | B |
| ATOM | 1828 | CA | MET | B | 118 | 49.622 | 93.496 | 80.287 | 1.00 | 96.23 | B |
| ATOM | 1829 | CB | MET | B | 118 | 50.998 | 94.064 | 79.943 | 1.00 | 79.11 | B |
| ATOM | 1830 | CG | MET | B | 118 | 52.127 | 93.097 | 80.231 | 1.00 | 79.11 | B |
| ATOM | 1831 | SD | MET | B | 118 | 53.724 | 93.895 | 80.434 | 1.00 | 79.11 | B |
| ATOM | 1832 | CE | MET | B | 118 | 54.334 | 93.863 | 78.735 | 1.00 | 79.11 | B |
| ATOM | 1833 | C | MET | B | 118 | 49.536 | 93.238 | 81.789 | 1.00 | 96.23 | B |
| ATOM | 1834 | O | MET | B | 118 | 49.933 | 94.087 | 82.593 | 1.00 | 96.23 | B |
| ATOM | 1835 | N | ASN | B | 119 | 49.020 | 92.069 | 82.166 | 1.00 | 100.00 | B |
| ATOM | 1836 | CA | ASN | B | 119 | 48.871 | 91.724 | 83.578 | 1.00 | 100.00 | B |
| ATOM | 1837 | CB | ASN | B | 119 | 48.084 | 90.418 | 83.743 | 1.00 | 95.42 | B |
| ATOM | 1838 | CG | ASN | B | 119 | 48.746 | 89.248 | 83.056 | 1.00 | 95.42 | B |
| ATOM | 1839 | OD1 | ASN | B | 119 | 49.948 | 89.022 | 83.207 | 1.00 | 95.42 | B |
| ATOM | 1840 | ND2 | ASN | B | 119 | 47.961 | 88.485 | 82.303 | 1.00 | 95.42 | B |
| ATOM | 1841 | C | ASN | B | 119 | 50.189 | 91.617 | 84.327 | 1.00 | 100.00 | B |
| ATOM | 1842 | O | ASN | B | 119 | 51.267 | 91.695 | 83.738 | 1.00 | 100.00 | B |
| ATOM | 1843 | N | GLU | B | 120 | 50.082 | 91.430 | 85.638 | 1.00 | 93.68 | B |
| ATOM | 1844 | CA | GLU | B | 120 | 51.241 | 91.327 | 86.513 | 1.00 | 93.68 | B |
| ATOM | 1845 | CB | GLU | B | 120 | 50.785 | 90.913 | 87.908 | 1.00 | 100.00 | B |
| ATOM | 1846 | CG | GLU | B | 120 | 51.885 | 90.917 | 88.944 | 1.00 | 100.00 | B |
| ATOM | 1847 | CD | GLU | B | 120 | 51.349 | 90.708 | 90.343 | 1.00 | 100.00 | B |
| ATOM | 1848 | OE1 | GLU | B | 120 | 50.724 | 89.652 | 90.590 | 1.00 | 100.00 | B |
| ATOM | 1849 | OE2 | GLU | B | 120 | 51.550 | 91.603 | 91.191 | 1.00 | 100.00 | B |
| ATOM | 1850 | C | GLU | B | 120 | 52.309 | 90.362 | 86.008 | 1.00 | 93.68 | B |
| ATOM | 1851 | O | GLU | B | 120 | 53.506 | 90.599 | 86.189 | 1.00 | 93.68 | B |
| ATOM | 1852 | N | LYS | B | 121 | 51.876 | 89.275 | 85.380 | 1.00 | 100.00 | B |
| ATOM | 1853 | CA | LYS | B | 121 | 52.806 | 88.282 | 84.856 | 1.00 | 100.00 | B |
| ATOM | 1854 | CB | LYS | B | 121 | 52.047 | 87.025 | 84.416 | 1.00 | 100.00 | B |
| ATOM | 1855 | CG | LYS | B | 121 | 51.533 | 86.181 | 85.575 | 1.00 | 100.00 | B |
| ATOM | 1856 | CD | LYS | B | 121 | 50.645 | 85.033 | 85.107 | 1.00 | 100.00 | B |
| ATOM | 1857 | CE | LYS | B | 121 | 49.336 | 85.540 | 84.516 | 1.00 | 100.00 | B |
| ATOM | 1858 | NZ | LYS | B | 121 | 48.381 | 84.433 | 84.229 | 1.00 | 100.00 | B |
| ATOM | 1859 | C | LYS | B | 121 | 53.616 | 88.833 | 83.688 | 1.00 | 100.00 | B |
| ATOM | 1860 | O | LYS | B | 121 | 54.817 | 88.578 | 83.576 | 1.00 | 100.00 | B |
| ATOM | 1861 | N | GLY | B | 122 | 52.956 | 89.601 | 82.827 | 1.00 | 83.99 | B |
| ATOM | 1862 | CA | GLY | B | 122 | 53.627 | 90.162 | 81.669 | 1.00 | 83.99 | B |
| ATOM | 1863 | C | GLY | B | 122 | 52.930 | 89.647 | 80.429 | 1.00 | 83.99 | B |
| ATOM | 1864 | O | GLY | B | 122 | 53.497 | 89.613 | 79.336 | 1.00 | 83.99 | B |
| ATOM | 1865 | N | GLU | B | 123 | 51.682 | 89.237 | 80.617 | 1.00 | 89.80 | B |
| ATOM | 1866 | CA | GLU | B | 123 | 50.872 | 88.710 | 79.533 | 1.00 | 89.80 | B |
| ATOM | 1867 | CB | GLU | B | 123 | 49.971 | 87.587 | 80.046 | 1.00 | 100.00 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 1868 | CG | GLU | B | 123 | 50.718 | 86.411 | 80.647 | 1.00 | 100.00 | B |
| ATOM | 1869 | CD | GLU | B | 123 | 49.780 | 85.312 | 81.107 | 1.00 | 100.00 | B |
| ATOM | 1870 | OE1 | GLU | B | 123 | 50.277 | 84.266 | 81.576 | 1.00 | 100.00 | B |
| ATOM | 1871 | OE2 | GLU | B | 123 | 48.546 | 85.496 | 81.001 | 1.00 | 100.00 | B |
| ATOM | 1872 | C | GLU | B | 123 | 50.013 | 89.806 | 78.924 | 1.00 | 89.80 | B |
| ATOM | 1873 | O | GLU | B | 123 | 49.378 | 90.585 | 79.637 | 1.00 | 89.80 | B |
| ATOM | 1874 | N | LEU | B | 124 | 49.994 | 89.852 | 77.597 | 1.00 | 86.82 | B |
| ATOM | 1875 | CA | LEU | B | 124 | 49.215 | 90.846 | 76.876 | 1.00 | 86.82 | B |
| ATOM | 1876 | CB | LEU | B | 124 | 49.876 | 91.146 | 75.524 | 1.00 | 95.45 | B |
| ATOM | 1877 | CG | LEU | B | 124 | 51.380 | 91.450 | 75.560 | 1.00 | 95.45 | B |
| ATOM | 1878 | CD1 | LEU | B | 124 | 51.905 | 91.625 | 74.145 | 1.00 | 95.45 | B |
| ATOM | 1879 | CD2 | LEU | B | 124 | 51.639 | 92.695 | 76.386 | 1.00 | 95.45 | B |
| ATOM | 1880 | C | LEU | B | 124 | 47.793 | 90.332 | 76.666 | 1.00 | 86.82 | B |
| ATOM | 1881 | O | LEU | B | 124 | 47.588 | 89.187 | 76.261 | 1.00 | 86.82 | B |
| ATOM | 1882 | N | TYR | B | 125 | 46.815 | 91.183 | 76.955 | 1.00 | 71.65 | B |
| ATOM | 1883 | CA | TYR | B | 125 | 45.411 | 90.823 | 76.796 | 1.00 | 71.65 | B |
| ATOM | 1884 | CB | TYR | B | 125 | 44.843 | 90.282 | 78.109 | 1.00 | 65.11 | B |
| ATOM | 1885 | CG | TYR | B | 125 | 44.833 | 91.299 | 79.235 | 1.00 | 65.11 | B |
| ATOM | 1886 | CD1 | TYR | B | 125 | 45.994 | 91.581 | 79.962 | 1.00 | 65.11 | B |
| ATOM | 1887 | CE1 | TYR | B | 125 | 45.991 | 92.540 | 80.980 | 1.00 | 65.11 | B |
| ATOM | 1888 | CD2 | TYR | B | 125 | 43.667 | 92.002 | 79.553 | 1.00 | 65.11 | B |
| ATOM | 1889 | CE2 | TYR | B | 125 | 43.653 | 92.959 | 80.564 | 1.00 | 65.11 | B |
| ATOM | 1890 | CZ | TYR | B | 125 | 44.817 | 93.226 | 81.274 | 1.00 | 65.11 | B |
| ATOM | 1891 | OH | TYR | B | 125 | 44.804 | 94.184 | 82.269 | 1.00 | 65.11 | B |
| ATOM | 1892 | C | TYR | B | 125 | 44.614 | 92.050 | 76.377 | 1.00 | 71.65 | B |
| ATOM | 1893 | O | TYR | B | 125 | 45.065 | 93.180 | 76.554 | 1.00 | 71.65 | B |
| ATOM | 1894 | N | GLY | B | 126 | 43.423 | 91.820 | 75.835 | 1.00 | 84.06 | B |
| ATOM | 1895 | CA | GLY | B | 126 | 42.585 | 92.919 | 75.396 | 1.00 | 84.06 | B |
| ATOM | 1896 | C | GLY | B | 126 | 41.552 | 93.336 | 76.420 | 1.00 | 84.06 | B |
| ATOM | 1897 | O | GLY | B | 126 | 40.406 | 92.894 | 76.367 | 1.00 | 84.06 | B |
| ATOM | 1898 | N | SER | B | 127 | 41.957 | 94.192 | 77.352 | 1.00 | 89.43 | B |
| ATOM | 1899 | CA | SER | B | 127 | 41.062 | 94.679 | 78.396 | 1.00 | 89.43 | B |
| ATOM | 1900 | CB | SER | B | 127 | 41.814 | 95.605 | 79.349 | 1.00 | 70.88 | B |
| ATOM | 1901 | OG | SER | B | 127 | 40.914 | 96.244 | 80.234 | 1.00 | 70.88 | B |
| ATOM | 1902 | C | SER | B | 127 | 39.873 | 95.426 | 77.812 | 1.00 | 89.43 | B |
| ATOM | 1903 | O | SER | B | 127 | 39.978 | 96.055 | 76.762 | 1.00 | 89.43 | B |
| ATOM | 1904 | N | GLU | B | 128 | 38.743 | 95.357 | 78.504 | 1.00 | 90.28 | B |
| ATOM | 1905 | CA | GLU | B | 128 | 37.529 | 96.030 | 78.061 | 1.00 | 90.28 | B |
| ATOM | 1906 | CB | GLU | B | 128 | 36.295 | 95.217 | 78.473 | 1.00 | 100.00 | B |
| ATOM | 1907 | CG | GLU | B | 128 | 36.226 | 94.850 | 79.962 | 1.00 | 100.00 | B |
| ATOM | 1908 | CD | GLU | B | 128 | 37.227 | 93.769 | 80.367 | 1.00 | 100.00 | B |
| ATOM | 1909 | OE1 | GLU | B | 128 | 37.152 | 92.645 | 79.821 | 1.00 | 100.00 | B |
| ATOM | 1910 | OE2 | GLU | B | 128 | 38.087 | 94.039 | 81.236 | 1.00 | 100.00 | B |
| ATOM | 1911 | C | GLU | B | 128 | 37.459 | 97.427 | 78.666 | 1.00 | 90.28 | B |
| ATOM | 1912 | O | GLU | B | 128 | 36.672 | 98.269 | 78.230 | 1.00 | 90.28 | B |
| ATOM | 1913 | N | LYS | B | 129 | 38.301 | 97.666 | 79.666 | 1.00 | 84.11 | B |
| ATOM | 1914 | CA | LYS | B | 129 | 38.346 | 98.950 | 80.355 | 1.00 | 84.11 | B |
| ATOM | 1915 | CB | LYS | B | 129 | 37.762 | 98.797 | 81.763 | 1.00 | 100.00 | B |
| ATOM | 1916 | CG | LYS | B | 129 | 38.379 | 97.651 | 82.556 | 1.00 | 100.00 | B |
| ATOM | 1917 | CD | LYS | B | 129 | 37.891 | 97.626 | 83.998 | 1.00 | 100.00 | B |
| ATOM | 1918 | CE | LYS | B | 129 | 38.603 | 96.543 | 84.800 | 1.00 | 100.00 | B |
| ATOM | 1919 | NZ | LYS | B | 129 | 38.260 | 96.610 | 86.246 | 1.00 | 100.00 | B |
| ATOM | 1920 | C | LYS | B | 129 | 39.775 | 99.490 | 80.442 | 1.00 | 84.11 | B |
| ATOM | 1921 | O | LYS | B | 129 | 40.734 | 98.731 | 80.603 | 1.00 | 84.11 | B |
| ATOM | 1922 | N | LEU | B | 130 | 39.910 | 100.809 | 80.345 | 1.00 | 74.10 | B |
| ATOM | 1923 | CA | LEU | B | 130 | 41.220 | 101.449 | 80.406 | 1.00 | 74.10 | B |
| ATOM | 1924 | CB | LEU | B | 130 | 41.137 | 102.875 | 79.845 | 1.00 | 62.37 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 1925 | CG | LEU | B | 130 | 42.422 | 103.527 | 79.309 | 1.00 | 62.37 | B |
| ATOM | 1926 | CD1 | LEU | B | 130 | 42.224 | 105.034 | 79.301 | 1.00 | 62.37 | B |
| ATOM | 1927 | CD2 | LEU | B | 130 | 43.629 | 103.171 | 80.165 | 1.00 | 62.37 | B |
| ATOM | 1928 | C | LEU | B | 130 | 41.749 | 101.502 | 81.840 | 1.00 | 74.10 | B |
| ATOM | 1929 | O | LEU | B | 130 | 41.312 | 102.323 | 82.642 | 1.00 | 74.10 | B |
| ATOM | 1930 | N | THR | B | 131 | 42.705 | 100.636 | 82.153 | 1.00 | 71.38 | B |
| ATOM | 1931 | CA | THR | B | 131 | 43.285 | 100.598 | 83.492 | 1.00 | 71.38 | B |
| ATOM | 1932 | CB | THR | B | 131 | 43.106 | 99.211 | 84.125 | 1.00 | 71.14 | B |
| ATOM | 1933 | OG1 | THR | B | 131 | 43.971 | 98.269 | 83.475 | 1.00 | 71.14 | B |
| ATOM | 1934 | CG2 | THR | B | 131 | 41.666 | 98.754 | 83.972 | 1.00 | 71.14 | B |
| ATOM | 1935 | C | THR | B | 131 | 44.773 | 100.913 | 83.427 | 1.00 | 71.38 | B |
| ATOM | 1936 | O | THR | B | 131 | 45.328 | 101.060 | 82.339 | 1.00 | 71.38 | B |
| ATOM | 1937 | N | GLN | B | 132 | 45.415 | 101.019 | 84.587 | 1.00 | 71.46 | B |
| ATOM | 1938 | CA | GLN | B | 132 | 46.847 | 101.308 | 84.635 | 1.00 | 71.46 | B |
| ATOM | 1939 | CB | GLN | B | 132 | 47.331 | 101.378 | 86.080 | 1.00 | 99.65 | B |
| ATOM | 1940 | CG | GLN | B | 132 | 46.673 | 102.462 | 86.900 | 1.00 | 99.65 | B |
| ATOM | 1941 | CD | GLN | B | 132 | 47.210 | 102.513 | 88.312 | 1.00 | 99.65 | B |
| ATOM | 1942 | OE1 | GLN | B | 132 | 48.407 | 102.703 | 88.525 | 1.00 | 99.65 | B |
| ATOM | 1943 | NE2 | GLN | B | 132 | 46.327 | 102.342 | 89.287 | 1.00 | 99.65 | B |
| ATOM | 1944 | C | GLN | B | 132 | 47.596 | 100.197 | 83.913 | 1.00 | 71.46 | B |
| ATOM | 1945 | O | GLN | B | 132 | 48.718 | 100.381 | 83.432 | 1.00 | 71.46 | B |
| ATOM | 1946 | N | GLU | B | 133 | 46.953 | 99.039 | 83.840 | 1.00 | 99.82 | B |
| ATOM | 1947 | CA | GLU | B | 133 | 47.532 | 97.873 | 83.194 | 1.00 | 99.82 | B |
| ATOM | 1948 | CB | GLU | B | 133 | 46.774 | 96.625 | 83.657 | 1.00 | 99.09 | B |
| ATOM | 1949 | CG | GLU | B | 133 | 47.449 | 95.311 | 83.329 | 1.00 | 99.09 | B |
| ATOM | 1950 | CD | GLU | B | 133 | 47.139 | 94.236 | 84.353 | 1.00 | 99.09 | B |
| ATOM | 1951 | OE1 | GLU | B | 133 | 47.585 | 94.371 | 85.513 | 1.00 | 99.09 | B |
| ATOM | 1952 | OE2 | GLU | B | 133 | 46.449 | 93.257 | 84.002 | 1.00 | 99.09 | B |
| ATOM | 1953 | C | GLU | B | 133 | 47.471 | 98.012 | 81.675 | 1.00 | 99.82 | B |
| ATOM | 1954 | O | GLU | B | 133 | 47.779 | 97.073 | 80.943 | 1.00 | 99.82 | B |
| ATOM | 1955 | N | CYS | B | 134 | 47.093 | 99.198 | 81.209 | 1.00 | 83.03 | B |
| ATOM | 1956 | CA | CYS | B | 134 | 46.970 | 99.458 | 79.780 | 1.00 | 83.03 | B |
| ATOM | 1957 | CB | CYS | B | 134 | 45.496 | 99.634 | 79.420 | 1.00 | 84.81 | B |
| ATOM | 1958 | SG | CYS | B | 134 | 44.431 | 98.314 | 80.031 | 1.00 | 84.81 | B |
| ATOM | 1959 | C | CYS | B | 134 | 47.751 | 100.688 | 79.321 | 1.00 | 83.03 | B |
| ATOM | 1960 | O | CYS | B | 134 | 47.696 | 101.069 | 78.152 | 1.00 | 83.03 | B |
| ATOM | 1961 | N | VAL | B | 135 | 48.474 | 101.308 | 80.245 | 1.00 | 81.69 | B |
| ATOM | 1962 | CA | VAL | B | 135 | 49.262 | 102.492 | 79.929 | 1.00 | 81.69 | B |
| ATOM | 1963 | CB | VAL | B | 135 | 49.110 | 103.564 | 81.030 | 1.00 | 74.62 | B |
| ATOM | 1964 | CG1 | VAL | B | 135 | 50.025 | 104.746 | 80.744 | 1.00 | 74.62 | B |
| ATOM | 1965 | CG2 | VAL | B | 135 | 47.660 | 104.011 | 81.110 | 1.00 | 74.62 | B |
| ATOM | 1966 | C | VAL | B | 135 | 50.733 | 102.120 | 79.792 | 1.00 | 81.69 | B |
| ATOM | 1967 | O | VAL | B | 135 | 51.384 | 101.750 | 80.772 | 1.00 | 81.69 | B |
| ATOM | 1968 | N | PHE | B | 136 | 51.257 | 102.227 | 78.574 | 1.00 | 71.72 | B |
| ATOM | 1969 | CA | PHE | B | 136 | 52.648 | 101.880 | 78.327 | 1.00 | 71.72 | B |
| ATOM | 1970 | CB | PHE | B | 136 | 52.760 | 100.917 | 77.142 | 1.00 | 73.76 | B |
| ATOM | 1971 | CG | PHE | B | 136 | 51.818 | 99.757 | 77.213 | 1.00 | 73.76 | B |
| ATOM | 1972 | CD1 | PHE | B | 136 | 50.474 | 99.913 | 76.877 | 1.00 | 73.76 | B |
| ATOM | 1973 | CD2 | PHE | B | 136 | 52.269 | 98.505 | 77.622 | 1.00 | 73.76 | B |
| ATOM | 1974 | CE1 | PHE | B | 136 | 49.593 | 98.837 | 76.944 | 1.00 | 73.76 | B |
| ATOM | 1975 | CE2 | PHE | B | 136 | 51.394 | 97.421 | 77.694 | 1.00 | 73.76 | B |
| ATOM | 1976 | CZ | PHE | B | 136 | 50.054 | 97.587 | 77.353 | 1.00 | 73.76 | B |
| ATOM | 1977 | C | PHE | B | 136 | 53.537 | 103.077 | 78.054 | 1.00 | 71.72 | B |
| ATOM | 1978 | O | PHE | B | 136 | 53.069 | 104.158 | 77.690 | 1.00 | 71.72 | B |
| ATOM | 1979 | N | ARG | B | 137 | 54.833 | 102.863 | 78.234 | 1.00 | 76.13 | B |
| ATOM | 1980 | CA | ARG | B | 137 | 55.828 | 103.886 | 77.984 | 1.00 | 76.13 | B |
| ATOM | 1981 | CB | ARG | B | 137 | 57.055 | 103.664 | 78.865 | 1.00 | 99.50 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 1982 | CG | ARG | B | 137 | 56.813 | 103.777 | 80.354 | 1.00 | 99.50 | B |
| ATOM | 1983 | CD | ARG | B | 137 | 58.113 | 103.522 | 81.104 | 1.00 | 99.50 | B |
| ATOM | 1984 | NE | ARG | B | 137 | 58.044 | 103.899 | 82.513 | 1.00 | 99.50 | B |
| ATOM | 1985 | CZ | ARG | B | 137 | 59.089 | 103.889 | 83.335 | 1.00 | 99.50 | B |
| ATOM | 1986 | NH1 | ARG | B | 137 | 60.280 | 103.518 | 82.886 | 1.00 | 99.50 | B |
| ATOM | 1987 | NH2 | ARG | B | 137 | 58.947 | 104.257 | 84.602 | 1.00 | 99.50 | B |
| ATOM | 1988 | C | ARG | B | 137 | 56.242 | 103.777 | 76.520 | 1.00 | 76.13 | B |
| ATOM | 1989 | O | ARG | B | 137 | 57.010 | 102.883 | 76.152 | 1.00 | 76.13 | B |
| ATOM | 1990 | N | GLU | B | 138 | 55.718 | 104.672 | 75.688 | 1.00 | 74.09 | B |
| ATOM | 1991 | CA | GLU | B | 138 | 56.057 | 104.688 | 74.272 | 1.00 | 74.09 | B |
| ATOM | 1992 | CB | GLU | B | 138 | 54.977 | 105.409 | 73.463 | 1.00 | 67.11 | B |
| ATOM | 1993 | CG | GLU | B | 138 | 55.318 | 105.569 | 71.977 | 1.00 | 67.11 | B |
| ATOM | 1994 | CD | GLU | B | 138 | 54.322 | 106.440 | 71.226 | 1.00 | 67.11 | B |
| ATOM | 1995 | OE1 | GLU | B | 138 | 54.216 | 107.641 | 71.556 | 1.00 | 67.11 | B |
| ATOM | 1996 | OE2 | GLU | B | 138 | 53.647 | 105.926 | 70.308 | 1.00 | 67.11 | B |
| ATOM | 1997 | C | GLU | B | 138 | 57.370 | 105.436 | 74.122 | 1.00 | 74.09 | B |
| ATOM | 1998 | O | GLU | B | 138 | 57.421 | 106.642 | 74.346 | 1.00 | 74.09 | B |
| ATOM | 1999 | N | GLN | B | 139 | 58.429 | 104.727 | 73.746 | 1.00 | 83.30 | B |
| ATOM | 2000 | CA | GLN | B | 139 | 59.731 | 105.360 | 73.576 | 1.00 | 83.30 | B |
| ATOM | 2001 | CB | GLN | B | 139 | 60.644 | 104.996 | 74.746 | 1.00 | 89.59 | B |
| ATOM | 2002 | CG | GLN | B | 139 | 60.327 | 105.773 | 76.003 | 1.00 | 89.59 | B |
| ATOM | 2003 | CD | GLN | B | 139 | 61.046 | 105.237 | 77.213 | 1.00 | 89.59 | B |
| ATOM | 2004 | OE1 | GLN | B | 139 | 62.271 | 105.119 | 77.224 | 1.00 | 89.59 | B |
| ATOM | 2005 | NE2 | GLN | B | 139 | 60.286 | 104.908 | 78.248 | 1.00 | 89.59 | B |
| ATOM | 2006 | C | GLN | B | 139 | 60.416 | 105.034 | 72.253 | 1.00 | 83.30 | B |
| ATOM | 2007 | O | GLN | B | 139 | 60.384 | 103.900 | 71.771 | 1.00 | 83.30 | B |
| ATOM | 2008 | N | PHE | B | 140 | 61.041 | 106.053 | 71.675 | 1.00 | 80.44 | B |
| ATOM | 2009 | CA | PHE | B | 140 | 61.734 | 105.930 | 70.401 | 1.00 | 80.44 | B |
| ATOM | 2010 | CB | PHE | B | 140 | 62.177 | 107.323 | 69.938 | 1.00 | 83.11 | B |
| ATOM | 2011 | CG | PHE | B | 140 | 62.947 | 107.322 | 68.652 | 1.00 | 83.11 | B |
| ATOM | 2012 | CD1 | PHE | B | 140 | 62.299 | 107.126 | 67.437 | 1.00 | 83.11 | B |
| ATOM | 2013 | CD2 | PHE | B | 140 | 64.328 | 107.502 | 68.656 | 1.00 | 83.11 | B |
| ATOM | 2014 | CE1 | PHE | B | 140 | 63.017 | 107.110 | 66.243 | 1.00 | 83.11 | B |
| ATOM | 2015 | CE2 | PHE | B | 140 | 65.054 | 107.486 | 67.470 | 1.00 | 83.11 | B |
| ATOM | 2016 | CZ | PHE | B | 140 | 64.396 | 107.290 | 66.260 | 1.00 | 83.11 | B |
| ATOM | 2017 | C | PHE | B | 140 | 62.948 | 105.001 | 70.461 | 1.00 | 80.44 | B |
| ATOM | 2018 | O | PHE | B | 140 | 63.762 | 105.090 | 71.380 | 1.00 | 80.44 | B |
| ATOM | 2019 | N | GLU | B | 141 | 63.059 | 104.109 | 69.480 | 1.00 | 81.14 | B |
| ATOM | 2020 | CA | GLU | B | 141 | 64.193 | 103.189 | 69.385 | 1.00 | 81.14 | B |
| ATOM | 2021 | CB | GLU | B | 141 | 63.721 | 101.759 | 69.115 | 1.00 | 72.53 | B |
| ATOM | 2022 | CG | GLU | B | 141 | 63.916 | 100.784 | 70.281 | 1.00 | 72.53 | B |
| ATOM | 2023 | CD | GLU | B | 141 | 65.369 | 100.650 | 70.732 | 1.00 | 72.53 | B |
| ATOM | 2024 | OE1 | GLU | B | 141 | 65.877 | 101.559 | 71.427 | 1.00 | 72.53 | B |
| ATOM | 2025 | OE2 | GLU | B | 141 | 66.005 | 99.631 | 70.386 | 1.00 | 72.53 | B |
| ATOM | 2026 | C | GLU | B | 141 | 65.070 | 103.659 | 68.226 | 1.00 | 81.14 | B |
| ATOM | 2027 | O | GLU | B | 141 | 66.069 | 104.353 | 68.426 | 1.00 | 81.14 | B |
| ATOM | 2028 | N | GLU | B | 142 | 64.684 | 103.277 | 67.012 | 1.00 | 71.75 | B |
| ATOM | 2029 | CA | GLU | B | 142 | 65.405 | 103.673 | 65.806 | 1.00 | 71.75 | B |
| ATOM | 2030 | CB | GLU | B | 142 | 66.612 | 102.751 | 65.569 | 1.00 | 100.00 | B |
| ATOM | 2031 | CG | GLU | B | 142 | 66.381 | 101.274 | 65.867 | 1.00 | 100.00 | B |
| ATOM | 2032 | CD | GLU | B | 142 | 65.314 | 100.650 | 64.990 | 1.00 | 100.00 | B |
| ATOM | 2033 | OE1 | GLU | B | 142 | 65.443 | 100.718 | 63.748 | 1.00 | 100.00 | B |
| ATOM | 2034 | OE2 | GLU | B | 142 | 64.347 | 100.085 | 65.543 | 1.00 | 100.00 | B |
| ATOM | 2035 | C | GLU | B | 142 | 64.482 | 103.677 | 64.587 | 1.00 | 71.75 | B |
| ATOM | 2036 | O | GLU | B | 142 | 63.506 | 102.926 | 64.532 | 1.00 | 71.75 | B |
| ATOM | 2037 | N | ASN | B | 143 | 64.791 | 104.541 | 63.622 | 1.00 | 62.98 | B |
| ATOM | 2038 | CA | ASN | B | 143 | 64.003 | 104.678 | 62.393 | 1.00 | 62.98 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 2039 | CB | ASN | B | 143 | 64.396 | 103.591 | 61.392 | 1.00 | 76.05 | B |
| ATOM | 2040 | CG | ASN | B | 143 | 65.845 | 103.711 | 60.954 | 1.00 | 76.05 | B |
| ATOM | 2041 | OD1 | ASN | B | 143 | 66.275 | 104.770 | 60.494 | 1.00 | 76.05 | B |
| ATOM | 2042 | ND2 | ASN | B | 143 | 66.606 | 102.631 | 61.099 | 1.00 | 76.05 | B |
| ATOM | 2043 | C | ASN | B | 143 | 62.500 | 104.655 | 62.652 | 1.00 | 62.98 | B |
| ATOM | 2044 | O | ASN | B | 143 | 61.733 | 103.988 | 61.946 | 1.00 | 62.98 | B |
| ATOM | 2045 | N | TRP | B | 144 | 62.111 | 105.399 | 63.687 | 1.00 | 52.62 | B |
| ATOM | 2046 | CA | TRP | B | 144 | 60.731 | 105.559 | 64.131 | 1.00 | 52.62 | B |
| ATOM | 2047 | CB | TRP | B | 144 | 59.920 | 106.265 | 63.042 | 1.00 | 53.19 | B |
| ATOM | 2048 | CG | TRP | B | 144 | 60.536 | 107.595 | 62.776 | 1.00 | 53.19 | B |
| ATOM | 2049 | CD2 | TRP | B | 144 | 60.559 | 108.711 | 63.674 | 1.00 | 53.19 | B |
| ATOM | 2050 | CE2 | TRP | B | 144 | 61.430 | 109.677 | 63.122 | 1.00 | 53.19 | B |
| ATOM | 2051 | CE3 | TRP | B | 144 | 59.934 | 108.986 | 64.899 | 1.00 | 53.19 | B |
| ATOM | 2052 | CD1 | TRP | B | 144 | 61.361 | 107.925 | 61.735 | 1.00 | 53.19 | B |
| ATOM | 2053 | NE1 | TRP | B | 144 | 61.906 | 109.172 | 61.940 | 1.00 | 53.19 | B |
| ATOM | 2054 | CZ2 | TRP | B | 144 | 61.694 | 110.900 | 63.757 | 1.00 | 53.19 | B |
| ATOM | 2055 | CZ3 | TRP | B | 144 | 60.200 | 110.203 | 65.531 | 1.00 | 53.19 | B |
| ATOM | 2056 | CH2 | TRP | B | 144 | 61.071 | 111.143 | 64.957 | 1.00 | 53.19 | B |
| ATOM | 2057 | C | TRP | B | 144 | 60.014 | 104.331 | 64.664 | 1.00 | 52.62 | B |
| ATOM | 2058 | O | TRP | B | 144 | 58.783 | 104.248 | 64.653 | 1.00 | 52.62 | B |
| ATOM | 2059 | N | TYR | B | 145 | 60.801 | 103.378 | 65.143 | 1.00 | 62.69 | B |
| ATOM | 2060 | CA | TYR | B | 145 | 60.252 | 102.189 | 65.763 | 1.00 | 62.69 | B |
| ATOM | 2061 | CB | TYR | B | 145 | 61.138 | 100.973 | 65.509 | 1.00 | 63.90 | B |
| ATOM | 2062 | CG | TYR | B | 145 | 60.758 | 100.167 | 64.289 | 1.00 | 63.90 | B |
| ATOM | 2063 | CD1 | TYR | B | 145 | 61.248 | 100.495 | 63.021 | 1.00 | 63.90 | B |
| ATOM | 2064 | CE1 | TYR | B | 145 | 60.900 | 99.737 | 61.897 | 1.00 | 63.90 | B |
| ATOM | 2065 | CD2 | TYR | B | 145 | 59.908 | 99.066 | 64.403 | 1.00 | 63.90 | B |
| ATOM | 2066 | CE2 | TYR | B | 145 | 59.554 | 98.308 | 63.293 | 1.00 | 63.90 | B |
| ATOM | 2067 | CZ | TYR | B | 145 | 60.052 | 98.644 | 62.045 | 1.00 | 63.90 | B |
| ATOM | 2068 | OH | TYR | B | 145 | 59.703 | 97.877 | 60.957 | 1.00 | 63.90 | B |
| ATOM | 2069 | C | TYR | B | 145 | 60.285 | 102.535 | 67.246 | 1.00 | 62.69 | B |
| ATOM | 2070 | O | TYR | B | 145 | 61.300 | 103.030 | 67.739 | 1.00 | 62.69 | B |
| ATOM | 2071 | N | ASN | B | 146 | 59.183 | 102.307 | 67.954 | 1.00 | 75.32 | B |
| ATOM | 2072 | CA | ASN | B | 146 | 59.142 | 102.603 | 69.383 | 1.00 | 75.32 | B |
| ATOM | 2073 | CB | ASN | B | 146 | 57.928 | 103.481 | 69.738 | 1.00 | 54.84 | B |
| ATOM | 2074 | CG | ASN | B | 146 | 57.894 | 104.799 | 68.978 | 1.00 | 54.84 | B |
| ATOM | 2075 | OD1 | ASN | B | 146 | 58.874 | 105.548 | 68.945 | 1.00 | 54.84 | B |
| ATOM | 2076 | ND2 | ASN | B | 146 | 56.747 | 105.094 | 68.376 | 1.00 | 54.84 | B |
| ATOM | 2077 | C | ASN | B | 146 | 59.036 | 101.310 | 70.185 | 1.00 | 75.32 | B |
| ATOM | 2078 | O | ASN | B | 146 | 58.671 | 100.264 | 69.647 | 1.00 | 75.32 | B |
| ATOM | 2079 | N | THR | B | 147 | 59.367 | 101.389 | 71.472 | 1.00 | 70.49 | B |
| ATOM | 2080 | CA | THR | B | 147 | 59.253 | 100.244 | 72.373 | 1.00 | 70.49 | B |
| ATOM | 2081 | CB | THR | B | 147 | 60.500 | 100.064 | 73.272 | 1.00 | 68.35 | B |
| ATOM | 2082 | OG1 | THR | B | 147 | 60.703 | 101.241 | 74.065 | 1.00 | 68.35 | B |
| ATOM | 2083 | CG2 | THR | B | 147 | 61.726 | 99.809 | 72.433 | 1.00 | 68.35 | B |
| ATOM | 2084 | C | THR | B | 147 | 58.059 | 100.573 | 73.255 | 1.00 | 70.49 | B |
| ATOM | 2085 | O | THR | B | 147 | 57.739 | 101.745 | 73.450 | 1.00 | 70.49 | B |
| ATOM | 2086 | N | TYR | B | 148 | 57.396 | 99.550 | 73.776 | 1.00 | 78.77 | B |
| ATOM | 2087 | CA | TYR | B | 148 | 56.236 | 99.770 | 74.628 | 1.00 | 78.77 | B |
| ATOM | 2088 | CB | TYR | B | 148 | 54.957 | 99.432 | 73.858 | 1.00 | 75.53 | B |
| ATOM | 2089 | CG | TYR | B | 148 | 54.687 | 100.376 | 72.711 | 1.00 | 75.53 | B |
| ATOM | 2090 | CD1 | TYR | B | 148 | 54.010 | 101.577 | 72.914 | 1.00 | 75.53 | B |
| ATOM | 2091 | CE1 | TYR | B | 148 | 53.818 | 102.484 | 71.868 | 1.00 | 75.53 | B |
| ATOM | 2092 | CD2 | TYR | B | 148 | 55.165 | 100.099 | 71.430 | 1.00 | 75.53 | B |
| ATOM | 2093 | CE2 | TYR | B | 148 | 54.982 | 101.001 | 70.377 | 1.00 | 75.53 | B |
| ATOM | 2094 | CZ | TYR | B | 148 | 54.311 | 102.189 | 70.604 | 1.00 | 75.53 | B |
| ATOM | 2095 | OH | TYR | B | 148 | 54.144 | 103.085 | 69.572 | 1.00 | 75.53 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 2096 | C | TYR | B | 148 | 56.325 | 98.937 | 75.898 | 1.00 | 78.77 | B |
| ATOM | 2097 | O | TYR | B | 148 | 56.066 | 97.735 | 75.884 | 1.00 | 78.77 | B |
| ATOM | 2098 | N | SER | B | 149 | 56.692 | 99.586 | 76.998 | 1.00 | 76.62 | B |
| ATOM | 2099 | CA | SER | B | 149 | 56.818 | 98.906 | 78.280 | 1.00 | 76.62 | B |
| ATOM | 2100 | CB | SER | B | 149 | 58.176 | 99.225 | 78.913 | 1.00 | 85.78 | B |
| ATOM | 2101 | OG | SER | B | 149 | 58.304 | 100.610 | 79.188 | 1.00 | 85.78 | B |
| ATOM | 2102 | C | SER | B | 149 | 55.701 | 99.308 | 79.240 | 1.00 | 76.62 | B |
| ATOM | 2103 | O | SER | B | 149 | 55.252 | 100.451 | 79.233 | 1.00 | 76.62 | B |
| ATOM | 2104 | N | SER | B | 150 | 55.254 | 98.356 | 80.055 | 1.00 | 83.08 | B |
| ATOM | 2105 | CA | SER | B | 150 | 54.204 | 98.607 | 81.037 | 1.00 | 83.08 | B |
| ATOM | 2106 | CB | SER | B | 150 | 53.905 | 97.326 | 81.827 | 1.00 | 82.51 | B |
| ATOM | 2107 | OG | SER | B | 150 | 52.820 | 97.497 | 82.725 | 1.00 | 82.51 | B |
| ATOM | 2108 | C | SER | B | 150 | 54.720 | 99.686 | 81.982 | 1.00 | 83.08 | B |
| ATOM | 2109 | O | SER | B | 150 | 55.834 | 99.582 | 82.488 | 1.00 | 83.08 | B |
| ATOM | 2110 | N | ASN | B | 151 | 53.925 | 100.726 | 82.212 | 1.00 | 93.75 | B |
| ATOM | 2111 | CA | ASN | B | 151 | 54.348 | 101.800 | 83.103 | 1.00 | 93.75 | B |
| ATOM | 2112 | CB | ASN | B | 151 | 53.595 | 103.093 | 82.787 | 1.00 | 72.85 | B |
| ATOM | 2113 | CG | ASN | B | 151 | 54.243 | 104.313 | 83.424 | 1.00 | 72.85 | B |
| ATOM | 2114 | OD1 | ASN | B | 151 | 53.589 | 105.332 | 83.655 | 1.00 | 72.85 | B |
| ATOM | 2115 | ND2 | ASN | B | 151 | 55.538 | 104.218 | 83.699 | 1.00 | 72.85 | B |
| ATOM | 2116 | C | ASN | B | 151 | 54.079 | 101.411 | 84.554 | 1.00 | 93.75 | B |
| ATOM | 2117 | O | ASN | B | 151 | 54.269 | 102.213 | 85.470 | 1.00 | 93.75 | B |
| ATOM | 2118 | N | LEU | B | 152 | 53.637 | 100.173 | 84.753 | 1.00 | 100.00 | B |
| ATOM | 2119 | CA | LEU | B | 152 | 53.325 | 99.667 | 86.085 | 1.00 | 100.00 | B |
| ATOM | 2120 | CB | LEU | B | 152 | 51.912 | 99.085 | 86.092 | 1.00 | 65.90 | B |
| ATOM | 2121 | CG | LEU | B | 152 | 51.418 | 98.477 | 87.404 | 1.00 | 65.90 | B |
| ATOM | 2122 | CD1 | LEU | B | 152 | 51.607 | 99.481 | 88.535 | 1.00 | 65.90 | B |
| ATOM | 2123 | CD2 | LEU | B | 152 | 49.952 | 98.090 | 87.265 | 1.00 | 65.90 | B |
| ATOM | 2124 | C | LEU | B | 152 | 54.313 | 98.604 | 86.561 | 1.00 | 100.00 | B |
| ATOM | 2125 | O | LEU | B | 152 | 55.144 | 98.852 | 87.439 | 1.00 | 100.00 | B |
| ATOM | 2126 | N | TYR | B | 153 | 54.213 | 97.420 | 85.971 | 1.00 | 97.40 | B |
| ATOM | 2127 | CA | TYR | B | 153 | 55.072 | 96.300 | 86.323 | 1.00 | 97.40 | B |
| ATOM | 2128 | CB | TYR | B | 153 | 54.394 | 95.004 | 85.896 | 1.00 | 68.51 | B |
| ATOM | 2129 | CG | TYR | B | 153 | 52.961 | 94.909 | 86.367 | 1.00 | 68.51 | B |
| ATOM | 2130 | CD1 | TYR | B | 153 | 52.654 | 94.844 | 87.727 | 1.00 | 68.51 | B |
| ATOM | 2131 | CE1 | TYR | B | 153 | 51.335 | 94.770 | 88.166 | 1.00 | 68.51 | B |
| ATOM | 2132 | CD2 | TYR | B | 153 | 51.909 | 94.900 | 85.455 | 1.00 | 68.51 | B |
| ATOM | 2133 | CE2 | TYR | B | 153 | 50.586 | 94.827 | 85.883 | 1.00 | 68.51 | B |
| ATOM | 2134 | CZ | TYR | B | 153 | 50.308 | 94.763 | 87.238 | 1.00 | 68.51 | B |
| ATOM | 2135 | OH | TYR | B | 153 | 49.004 | 94.697 | 87.659 | 1.00 | 68.51 | B |
| ATOM | 2136 | C | TYR | B | 153 | 56.449 | 96.407 | 85.676 | 1.00 | 97.40 | B |
| ATOM | 2137 | O | TYR | B | 153 | 56.563 | 96.618 | 84.470 | 1.00 | 97.40 | B |
| ATOM | 2138 | N | LYS | B | 154 | 57.490 | 96.252 | 86.488 | 1.00 | 92.05 | B |
| ATOM | 2139 | CA | LYS | B | 154 | 58.868 | 96.332 | 86.012 | 1.00 | 92.05 | B |
| ATOM | 2140 | CB | LYS | B | 154 | 59.527 | 97.614 | 86.529 | 1.00 | 97.83 | B |
| ATOM | 2141 | CG | LYS | B | 154 | 59.504 | 97.750 | 88.049 | 1.00 | 97.83 | B |
| ATOM | 2142 | CD | LYS | B | 154 | 60.187 | 99.027 | 88.521 | 1.00 | 97.83 | B |
| ATOM | 2143 | CE | LYS | B | 154 | 61.681 | 99.012 | 88.225 | 1.00 | 97.83 | B |
| ATOM | 2144 | NZ | LYS | B | 154 | 62.347 | 100.261 | 88.692 | 1.00 | 97.83 | B |
| ATOM | 2145 | C | LYS | B | 154 | 59.680 | 95.126 | 86.479 | 1.00 | 92.05 | B |
| ATOM | 2146 | O | LYS | B | 154 | 59.207 | 94.325 | 87.289 | 1.00 | 92.05 | B |
| ATOM | 2147 | N | HIS | B | 155 | 60.900 | 94.996 | 85.963 | 1.00 | 99.49 | B |
| ATOM | 2148 | CA | HIS | B | 155 | 61.768 | 93.891 | 86.355 | 1.00 | 99.49 | B |
| ATOM | 2149 | CB | HIS | B | 155 | 63.026 | 93.844 | 85.478 | 1.00 | 100.00 | B |
| ATOM | 2150 | CG | HIS | B | 155 | 63.051 | 92.695 | 84.513 | 1.00 | 100.00 | B |
| ATOM | 2151 | CD2 | HIS | B | 155 | 63.943 | 91.689 | 84.346 | 1.00 | 100.00 | B |
| ATOM | 2152 | ND1 | HIS | B | 155 | 62.065 | 92.491 | 83.569 | 1.00 | 100.00 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 2153 | CE1 | HIS | B | 155 | 62.349 | 91.410 | 82.864 | 1.00 | 100.00 | B |
| ATOM | 2154 | NE2 | HIS | B | 155 | 63.483 | 90.905 | 83.315 | 1.00 | 100.00 | B |
| ATOM | 2155 | C | HIS | B | 155 | 62.155 | 94.065 | 87.817 | 1.00 | 99.49 | B |
| ATOM | 2156 | O | HIS | B | 155 | 63.017 | 94.881 | 88.158 | 1.00 | 99.49 | B |
| ATOM | 2157 | N | VAL | B | 156 | 61.491 | 93.289 | 88.668 | 1.00 | 100.00 | B |
| ATOM | 2158 | CA | VAL | B | 156 | 61.703 | 93.312 | 90.109 | 1.00 | 100.00 | B |
| ATOM | 2159 | CB | VAL | B | 156 | 61.149 | 92.012 | 90.760 | 1.00 | 100.00 | B |
| ATOM | 2160 | CG1 | VAL | B | 156 | 59.632 | 91.963 | 90.610 | 1.00 | 100.00 | B |
| ATOM | 2161 | CG2 | VAL | B | 156 | 61.776 | 90.780 | 90.107 | 1.00 | 100.00 | B |
| ATOM | 2162 | C | VAL | B | 156 | 63.159 | 93.506 | 90.537 | 1.00 | 100.00 | B |
| ATOM | 2163 | O | VAL | B | 156 | 63.501 | 94.514 | 91.162 | 1.00 | 100.00 | B |
| ATOM | 2164 | N | ASP | B | 157 | 64.014 | 92.550 | 90.188 | 1.00 | 100.00 | B |
| ATOM | 2165 | CA | ASP | B | 157 | 65.421 | 92.606 | 90.565 | 1.00 | 100.00 | B |
| ATOM | 2166 | CB | ASP | B | 157 | 66.048 | 91.213 | 90.427 | 1.00 | 100.00 | B |
| ATOM | 2167 | CG | ASP | B | 157 | 67.324 | 91.058 | 91.248 | 1.00 | 100.00 | B |
| ATOM | 2168 | OD1 | ASP | B | 157 | 68.264 | 91.859 | 91.054 | 1.00 | 100.00 | B |
| ATOM | 2169 | OD2 | ASP | B | 157 | 67.386 | 90.132 | 92.090 | 1.00 | 100.00 | B |
| ATOM | 2170 | C | ASP | B | 157 | 66.245 | 93.623 | 89.770 | 1.00 | 100.00 | B |
| ATOM | 2171 | O | ASP | B | 157 | 66.603 | 94.685 | 90.287 | 1.00 | 100.00 | B |
| ATOM | 2172 | N | THR | B | 158 | 66.541 | 93.288 | 88.515 | 1.00 | 99.85 | B |
| ATOM | 2173 | CA | THR | B | 158 | 67.345 | 94.142 | 87.636 | 1.00 | 99.85 | B |
| ATOM | 2174 | CB | THR | B | 158 | 67.363 | 93.595 | 86.179 | 1.00 | 100.00 | B |
| ATOM | 2175 | OG1 | THR | B | 158 | 66.032 | 93.584 | 85.643 | 1.00 | 100.00 | B |
| ATOM | 2176 | CG2 | THR | B | 158 | 67.926 | 92.180 | 86.148 | 1.00 | 100.00 | B |
| ATOM | 2177 | C | THR | B | 158 | 66.922 | 95.611 | 87.583 | 1.00 | 99.85 | B |
| ATOM | 2178 | O | THR | B | 158 | 67.757 | 96.510 | 87.708 | 1.00 | 99.85 | B |
| ATOM | 2179 | N | GLY | B | 159 | 65.628 | 95.851 | 87.398 | 1.00 | 98.79 | B |
| ATOM | 2180 | CA | GLY | B | 159 | 65.143 | 97.215 | 87.309 | 1.00 | 98.79 | B |
| ATOM | 2181 | C | GLY | B | 159 | 64.874 | 97.567 | 85.857 | 1.00 | 98.79 | B |
| ATOM | 2182 | O | GLY | B | 159 | 64.864 | 98.739 | 85.477 | 1.00 | 98.79 | B |
| ATOM | 2183 | N | ARG | B | 160 | 64.670 | 96.533 | 85.044 | 1.00 | 100.00 | B |
| ATOM | 2184 | CA | ARG | B | 160 | 64.385 | 96.695 | 83.623 | 1.00 | 100.00 | B |
| ATOM | 2185 | CB | ARG | B | 160 | 64.856 | 95.463 | 82.843 | 1.00 | 100.00 | B |
| ATOM | 2186 | CG | ARG | B | 160 | 66.319 | 95.089 | 83.074 | 1.00 | 100.00 | B |
| ATOM | 2187 | CD | ARG | B | 160 | 67.266 | 96.199 | 82.645 | 1.00 | 100.00 | B |
| ATOM | 2188 | NE | ARG | B | 160 | 68.664 | 95.831 | 82.848 | 1.00 | 100.00 | B |
| ATOM | 2189 | CZ | ARG | B | 160 | 69.700 | 96.603 | 82.527 | 1.00 | 100.00 | B |
| ATOM | 2190 | NH1 | ARG | B | 160 | 69.503 | 97.798 | 81.980 | 1.00 | 100.00 | B |
| ATOM | 2191 | NH2 | ARG | B | 160 | 70.937 | 96.181 | 82.759 | 1.00 | 100.00 | B |
| ATOM | 2192 | C | ARG | B | 160 | 62.876 | 96.852 | 83.479 | 1.00 | 100.00 | B |
| ATOM | 2193 | O | ARG | B | 160 | 62.174 | 97.018 | 84.475 | 1.00 | 100.00 | B |
| ATOM | 2194 | N | ARG | B | 161 | 62.369 | 96.794 | 82.252 | 1.00 | 84.80 | B |
| ATOM | 2195 | CA | ARG | B | 161 | 60.934 | 96.941 | 82.043 | 1.00 | 84.80 | B |
| ATOM | 2196 | CB | ARG | B | 161 | 60.641 | 98.262 | 81.329 | 1.00 | 84.54 | B |
| ATOM | 2197 | CG | ARG | B | 161 | 60.138 | 99.356 | 82.250 | 1.00 | 84.54 | B |
| ATOM | 2198 | CD | ARG | B | 161 | 58.962 | 98.844 | 83.063 | 1.00 | 84.54 | B |
| ATOM | 2199 | NE | ARG | B | 161 | 58.217 | 99.902 | 83.739 | 1.00 | 84.54 | B |
| ATOM | 2200 | CZ | ARG | B | 161 | 58.747 | 100.802 | 84.562 | 1.00 | 84.54 | B |
| ATOM | 2201 | NH1 | ARG | B | 161 | 60.049 | 100.794 | 84.826 | 1.00 | 84.54 | B |
| ATOM | 2202 | NH2 | ARG | B | 161 | 57.963 | 101.704 | 85.136 | 1.00 | 84.54 | B |
| ATOM | 2203 | C | ARG | B | 161 | 60.290 | 95.790 | 81.279 | 1.00 | 84.80 | B |
| ATOM | 2204 | O | ARG | B | 161 | 60.959 | 95.070 | 80.539 | 1.00 | 84.80 | B |
| ATOM | 2205 | N | TYR | B | 162 | 58.984 | 95.620 | 81.471 | 1.00 | 99.33 | B |
| ATOM | 2206 | CA | TYR | B | 162 | 58.242 | 94.563 | 80.792 | 1.00 | 99.33 | B |
| ATOM | 2207 | CB | TYR | B | 162 | 57.028 | 94.124 | 81.623 | 1.00 | 100.00 | B |
| ATOM | 2208 | CG | TYR | B | 162 | 57.353 | 93.438 | 82.938 | 1.00 | 100.00 | B |
| ATOM | 2209 | CD1 | TYR | B | 162 | 58.674 | 93.155 | 83.303 | 1.00 | 100.00 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|--------|--------|------|--------|---|
| ATOM | 2210 | CE1 | TYR | B | 162 | 58.971 | 92.531 | 84.519 | 1.00 | 100.00 | B |
| ATOM | 2211 | CD2 | TYR | B | 162 | 56.335 | 93.076 | 83.822 | 1.00 | 100.00 | B |
| ATOM | 2212 | CE2 | TYR | B | 162 | 56.619 | 92.452 | 85.040 | 1.00 | 100.00 | B |
| ATOM | 2213 | CZ | TYR | B | 162 | 57.938 | 92.183 | 85.383 | 1.00 | 100.00 | B |
| ATOM | 2214 | OH | TYR | B | 162 | 58.222 | 91.582 | 86.592 | 1.00 | 100.00 | B |
| ATOM | 2215 | C | TYR | B | 162 | 57.765 | 95.068 | 79.436 | 1.00 | 99.33 | B |
| ATOM | 2216 | O | TYR | B | 162 | 56.669 | 95.618 | 79.320 | 1.00 | 99.33 | B |
| ATOM | 2217 | N | TYR | B | 163 | 58.590 | 94.873 | 78.412 | 1.00 | 78.76 | B |
| ATOM | 2218 | CA | TYR | B | 163 | 58.261 | 95.322 | 77.064 | 1.00 | 78.76 | B |
| ATOM | 2219 | CB | TYR | B | 163 | 59.527 | 95.372 | 76.212 | 1.00 | 72.85 | B |
| ATOM | 2220 | CG | TYR | B | 163 | 60.507 | 96.411 | 76.674 | 1.00 | 72.85 | B |
| ATOM | 2221 | CD1 | TYR | B | 163 | 60.239 | 97.766 | 76.505 | 1.00 | 72.85 | B |
| ATOM | 2222 | CE1 | TYR | B | 163 | 61.119 | 98.737 | 76.969 | 1.00 | 72.85 | B |
| ATOM | 2223 | CD2 | TYR | B | 163 | 61.684 | 96.048 | 77.318 | 1.00 | 72.85 | B |
| ATOM | 2224 | CE2 | TYR | B | 163 | 62.572 | 97.011 | 77.788 | 1.00 | 72.85 | B |
| ATOM | 2225 | CZ | TYR | B | 163 | 62.282 | 98.352 | 77.610 | 1.00 | 72.85 | B |
| ATOM | 2226 | OH | TYR | B | 163 | 63.150 | 99.309 | 78.072 | 1.00 | 72.85 | B |
| ATOM | 2227 | C | TYR | B | 163 | 57.224 | 94.469 | 76.352 | 1.00 | 78.76 | B |
| ATOM | 2228 | O | TYR | B | 163 | 57.173 | 93.255 | 76.532 | 1.00 | 78.76 | B |
| ATOM | 2229 | N | VAL | B | 164 | 56.393 | 95.123 | 75.546 | 1.00 | 77.64 | B |
| ATOM | 2230 | CA | VAL | B | 164 | 55.382 | 94.429 | 74.762 | 1.00 | 77.64 | B |
| ATOM | 2231 | CB | VAL | B | 164 | 54.337 | 95.413 | 74.198 | 1.00 | 73.41 | B |
| ATOM | 2232 | CG1 | VAL | B | 164 | 53.285 | 94.660 | 73.400 | 1.00 | 73.41 | B |
| ATOM | 2233 | CG2 | VAL | B | 164 | 53.689 | 96.180 | 75.331 | 1.00 | 73.41 | B |
| ATOM | 2234 | C | VAL | B | 164 | 56.169 | 93.814 | 73.609 | 1.00 | 77.64 | B |
| ATOM | 2235 | O | VAL | B | 164 | 57.190 | 94.367 | 73.191 | 1.00 | 77.64 | B |
| ATOM | 2236 | N | ALA | B | 165 | 55.721 | 92.677 | 73.093 | 1.00 | 91.04 | B |
| ATOM | 2237 | CA | ALA | B | 165 | 56.459 | 92.055 | 72.003 | 1.00 | 91.04 | B |
| ATOM | 2238 | CB | ALA | B | 165 | 57.794 | 91.527 | 72.528 | 1.00 | 97.54 | B |
| ATOM | 2239 | C | ALA | B | 165 | 55.708 | 90.940 | 71.293 | 1.00 | 91.04 | B |
| ATOM | 2240 | O | ALA | B | 165 | 54.668 | 90.474 | 71.758 | 1.00 | 91.04 | B |
| ATOM | 2241 | N | LEU | B | 166 | 56.255 | 90.530 | 70.153 | 1.00 | 99.59 | B |
| ATOM | 2242 | CA | LEU | B | 166 | 55.686 | 89.458 | 69.348 | 1.00 | 99.59 | B |
| ATOM | 2243 | CB | LEU | B | 166 | 54.923 | 90.031 | 68.151 | 1.00 | 77.78 | B |
| ATOM | 2244 | CG | LEU | B | 166 | 53.622 | 90.784 | 68.447 | 1.00 | 77.78 | B |
| ATOM | 2245 | CD1 | LEU | B | 166 | 53.009 | 91.293 | 67.148 | 1.00 | 77.78 | B |
| ATOM | 2246 | CD2 | LEU | B | 166 | 52.649 | 89.860 | 69.161 | 1.00 | 77.78 | B |
| ATOM | 2247 | C | LEU | B | 166 | 56.813 | 88.546 | 68.863 | 1.00 | 99.59 | B |
| ATOM | 2248 | O | LEU | B | 166 | 57.777 | 89.008 | 68.246 | 1.00 | 99.59 | B |
| ATOM | 2249 | N | ASN | B | 167 | 56.689 | 87.254 | 69.157 | 1.00 | 100.00 | B |
| ATOM | 2250 | CA | ASN | B | 167 | 57.695 | 86.275 | 68.759 | 1.00 | 100.00 | B |
| ATOM | 2251 | CB | ASN | B | 167 | 57.370 | 84.904 | 69.363 | 1.00 | 90.34 | B |
| ATOM | 2252 | CG | ASN | B | 167 | 57.493 | 84.888 | 70.882 | 1.00 | 90.34 | B |
| ATOM | 2253 | OD1 | ASN | B | 167 | 58.570 | 85.131 | 71.433 | 1.00 | 90.34 | B |
| ATOM | 2254 | ND2 | ASN | B | 167 | 56.389 | 84.601 | 71.563 | 1.00 | 90.34 | B |
| ATOM | 2255 | C | ASN | B | 167 | 57.782 | 86.171 | 67.242 | 1.00 | 100.00 | B |
| ATOM | 2256 | O | ASN | B | 167 | 56.869 | 86.596 | 66.529 | 1.00 | 100.00 | B |
| ATOM | 2257 | N | LYS | B | 168 | 58.882 | 85.602 | 66.753 | 1.00 | 100.00 | B |
| ATOM | 2258 | CA | LYS | B | 168 | 59.104 | 85.457 | 65.318 | 1.00 | 100.00 | B |
| ATOM | 2259 | CB | LYS | B | 168 | 60.461 | 84.798 | 65.061 | 1.00 | 100.00 | B |
| ATOM | 2260 | CG | LYS | B | 168 | 61.659 | 85.638 | 65.477 | 1.00 | 100.00 | B |
| ATOM | 2261 | CD | LYS | B | 168 | 62.957 | 84.989 | 65.012 | 1.00 | 100.00 | B |
| ATOM | 2262 | CE | LYS | B | 168 | 64.167 | 85.849 | 65.342 | 1.00 | 100.00 | B |
| ATOM | 2263 | NZ | LYS | B | 168 | 65.428 | 85.264 | 64.802 | 1.00 | 100.00 | B |
| ATOM | 2264 | C | LYS | B | 168 | 58.016 | 84.682 | 64.571 | 1.00 | 100.00 | B |
| ATOM | 2265 | O | LYS | B | 168 | 58.094 | 84.524 | 63.351 | 1.00 | 100.00 | B |
| ATOM | 2266 | N | ASP | B | 169 | 57.005 | 84.204 | 65.293 | 1.00 | 95.71 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|--------|--------|------|--------|---|
| ATOM | 2267 | CA | ASP | B | 169 | 55.920 | 83.454 | 64.665 | 1.00 | 95.71 | B |
| ATOM | 2268 | CB | ASP | B | 169 | 55.884 | 82.019 | 65.202 | 1.00 | 100.00 | B |
| ATOM | 2269 | CG | ASP | B | 169 | 55.584 | 81.957 | 66.685 | 1.00 | 100.00 | B |
| ATOM | 2270 | OD1 | ASP | B | 169 | 56.304 | 82.615 | 67.467 | 1.00 | 100.00 | B |
| ATOM | 2271 | OD2 | ASP | B | 169 | 54.632 | 81.243 | 67.069 | 1.00 | 100.00 | B |
| ATOM | 2272 | C | ASP | B | 169 | 54.555 | 84.111 | 64.855 | 1.00 | 95.71 | B |
| ATOM | 2273 | O | ASP | B | 169 | 53.521 | 83.453 | 64.736 | 1.00 | 95.71 | B |
| ATOM | 2274 | N | GLY | B | 170 | 54.560 | 85.408 | 65.156 | 1.00 | 100.00 | B |
| ATOM | 2275 | CA | GLY | B | 170 | 53.317 | 86.141 | 65.338 | 1.00 | 100.00 | B |
| ATOM | 2276 | C | GLY | B | 170 | 52.538 | 85.843 | 66.607 | 1.00 | 100.00 | B |
| ATOM | 2277 | O | GLY | B | 170 | 51.312 | 85.976 | 66.634 | 1.00 | 100.00 | B |
| ATOM | 2278 | N | THR | B | 171 | 53.240 | 85.441 | 67.661 | 1.00 | 100.00 | B |
| ATOM | 2279 | CA | THR | B | 171 | 52.591 | 85.140 | 68.932 | 1.00 | 100.00 | B |
| ATOM | 2280 | CB | THR | B | 171 | 52.821 | 83.671 | 69.364 | 1.00 | 99.83 | B |
| ATOM | 2281 | OG1 | THR | B | 171 | 54.228 | 83.418 | 69.474 | 1.00 | 99.83 | B |
| ATOM | 2282 | CG2 | THR | B | 171 | 52.209 | 82.712 | 68.356 | 1.00 | 99.83 | B |
| ATOM | 2283 | C | THR | B | 171 | 53.138 | 86.051 | 70.025 | 1.00 | 100.00 | B |
| ATOM | 2284 | O | THR | B | 171 | 54.339 | 86.329 | 70.073 | 1.00 | 100.00 | B |
| ATOM | 2285 | N | PRO | B | 172 | 52.259 | 86.534 | 70.914 | 1.00 | 89.17 | B |
| ATOM | 2286 | CD | PRO | B | 172 | 50.801 | 86.324 | 70.912 | 1.00 | 72.94 | B |
| ATOM | 2287 | CA | PRO | B | 172 | 52.661 | 87.417 | 72.013 | 1.00 | 89.17 | B |
| ATOM | 2288 | CB | PRO | B | 172 | 51.324 | 87.808 | 72.640 | 1.00 | 72.94 | B |
| ATOM | 2289 | CG | PRO | B | 172 | 50.445 | 86.628 | 72.334 | 1.00 | 72.94 | B |
| ATOM | 2290 | C | PRO | B | 172 | 53.615 | 86.743 | 73.005 | 1.00 | 89.17 | B |
| ATOM | 2291 | O | PRO | B | 172 | 53.400 | 85.601 | 73.405 | 1.00 | 89.17 | B |
| ATOM | 2292 | N | ARG | B | 173 | 54.665 | 87.464 | 73.392 | 1.00 | 79.55 | B |
| ATOM | 2293 | CA | ARG | B | 173 | 55.675 | 86.962 | 74.324 | 1.00 | 79.55 | B |
| ATOM | 2294 | CB | ARG | B | 173 | 57.052 | 87.492 | 73.897 | 1.00 | 100.00 | B |
| ATOM | 2295 | CG | ARG | B | 173 | 58.260 | 86.853 | 74.577 | 1.00 | 100.00 | B |
| ATOM | 2296 | CD | ARG | B | 173 | 59.540 | 87.218 | 73.822 | 1.00 | 100.00 | B |
| ATOM | 2297 | NE | ARG | B | 173 | 60.767 | 86.754 | 74.475 | 1.00 | 100.00 | B |
| ATOM | 2298 | CZ | ARG | B | 173 | 61.089 | 85.478 | 74.676 | 1.00 | 100.00 | B |
| ATOM | 2299 | NH1 | ARG | B | 173 | 60.275 | 84.507 | 74.279 | 1.00 | 100.00 | B |
| ATOM | 2300 | NH2 | ARG | B | 173 | 62.237 | 85.172 | 75.270 | 1.00 | 100.00 | B |
| ATOM | 2301 | C | ARG | B | 173 | 55.348 | 87.394 | 75.758 | 1.00 | 79.55 | B |
| ATOM | 2302 | O | ARG | B | 173 | 54.252 | 87.889 | 76.027 | 1.00 | 79.55 | B |
| ATOM | 2303 | N | GLU | B | 174 | 56.293 | 87.193 | 76.674 | 1.00 | 87.53 | B |
| ATOM | 2304 | CA | GLU | B | 174 | 56.115 | 87.568 | 78.079 | 1.00 | 87.53 | B |
| ATOM | 2305 | CB | GLU | B | 174 | 56.660 | 86.477 | 79.008 | 1.00 | 100.00 | B |
| ATOM | 2306 | CG | GLU | B | 174 | 55.764 | 85.260 | 79.186 | 1.00 | 100.00 | B |
| ATOM | 2307 | CD | GLU | B | 174 | 55.554 | 84.482 | 77.903 | 1.00 | 100.00 | B |
| ATOM | 2308 | OE1 | GLU | B | 174 | 56.560 | 84.107 | 77.259 | 1.00 | 100.00 | B |
| ATOM | 2309 | OE2 | GLU | B | 174 | 54.381 | 84.238 | 77.545 | 1.00 | 100.00 | B |
| ATOM | 2310 | C | GLU | B | 174 | 56.838 | 88.873 | 78.389 | 1.00 | 87.53 | B |
| ATOM | 2311 | O | GLU | B | 174 | 58.006 | 89.042 | 78.031 | 1.00 | 87.53 | B |
| ATOM | 2312 | N | GLY | B | 175 | 56.144 | 89.787 | 79.062 | 1.00 | 84.47 | B |
| ATOM | 2313 | CA | GLY | B | 175 | 56.747 | 91.062 | 79.409 | 1.00 | 84.47 | B |
| ATOM | 2314 | C | GLY | B | 175 | 58.057 | 90.849 | 80.136 | 1.00 | 84.47 | B |
| ATOM | 2315 | O | GLY | B | 175 | 58.996 | 91.642 | 80.023 | 1.00 | 84.47 | B |
| ATOM | 2316 | N | THR | B | 176 | 58.115 | 89.751 | 80.878 | 1.00 | 99.28 | B |
| ATOM | 2317 | CA | THR | B | 176 | 59.290 | 89.382 | 81.653 | 1.00 | 99.28 | B |
| ATOM | 2318 | CB | THR | B | 176 | 58.929 | 88.287 | 82.656 | 1.00 | 99.44 | B |
| ATOM | 2319 | OG1 | THR | B | 176 | 58.365 | 87.174 | 81.950 | 1.00 | 99.44 | B |
| ATOM | 2320 | CG2 | THR | B | 176 | 57.913 | 88.804 | 83.664 | 1.00 | 99.44 | B |
| ATOM | 2321 | C | THR | B | 176 | 60.419 | 88.867 | 80.765 | 1.00 | 99.28 | B |
| ATOM | 2322 | O | THR | B | 176 | 61.601 | 89.040 | 81.076 | 1.00 | 99.28 | B |
| ATOM | 2323 | N | ARG | B | 177 | 60.043 | 88.234 | 79.658 | 1.00 | 100.00 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 2324 | CA | ARG | B | 177 | 61.009 | 87.672 | 78.723 | 1.00 | 100.00 | B |
| ATOM | 2325 | CB | ARG | B | 177 | 60.447 | 86.378 | 78.121 | 1.00 | 100.00 | B |
| ATOM | 2326 | CG | ARG | B | 177 | 60.135 | 85.295 | 79.151 | 1.00 | 100.00 | B |
| ATOM | 2327 | CD | ARG | B | 177 | 59.506 | 84.063 | 78.509 | 1.00 | 100.00 | B |
| ATOM | 2328 | NE | ARG | B | 177 | 60.360 | 83.475 | 77.477 | 1.00 | 100.00 | B |
| ATOM | 2329 | CZ | ARG | B | 177 | 60.046 | 82.392 | 76.769 | 1.00 | 100.00 | B |
| ATOM | 2330 | NH1 | ARG | B | 177 | 58.892 | 81.771 | 76.981 | 1.00 | 100.00 | B |
| ATOM | 2331 | NH2 | ARG | B | 177 | 60.882 | 81.933 | 75.844 | 1.00 | 100.00 | B |
| ATOM | 2332 | C | ARG | B | 177 | 61.398 | 88.635 | 77.599 | 1.00 | 100.00 | B |
| ATOM | 2333 | O | ARG | B | 177 | 61.624 | 88.209 | 76.466 | 1.00 | 100.00 | B |
| ATOM | 2334 | N | THR | B | 178 | 61.489 | 89.925 | 77.908 | 1.00 | 99.59 | B |
| ATOM | 2335 | CA | THR | B | 178 | 61.848 | 90.914 | 76.894 | 1.00 | 99.59 | B |
| ATOM | 2336 | CB | THR | B | 178 | 60.604 | 91.661 | 76.380 | 1.00 | 95.63 | B |
| ATOM | 2337 | OG1 | THR | B | 178 | 59.917 | 92.260 | 77.485 | 1.00 | 95.63 | B |
| ATOM | 2338 | CG2 | THR | B | 178 | 59.665 | 90.709 | 75.659 | 1.00 | 95.63 | B |
| ATOM | 2339 | C | THR | B | 178 | 62.854 | 91.961 | 77.362 | 1.00 | 99.59 | B |
| ATOM | 2340 | O | THR | B | 178 | 62.992 | 92.233 | 78.556 | 1.00 | 99.59 | B |
| ATOM | 2341 | N | LYS | B | 179 | 63.553 | 92.544 | 76.393 | 1.00 | 93.31 | B |
| ATOM | 2342 | CA | LYS | B | 179 | 64.544 | 93.580 | 76.649 | 1.00 | 93.31 | B |
| ATOM | 2343 | CB | LYS | B | 179 | 65.941 | 92.970 | 76.791 | 1.00 | 99.69 | B |
| ATOM | 2344 | CG | LYS | B | 179 | 66.140 | 92.164 | 78.060 | 1.00 | 99.69 | B |
| ATOM | 2345 | CD | LYS | B | 179 | 67.596 | 91.758 | 78.236 | 1.00 | 99.69 | B |
| ATOM | 2346 | CE | LYS | B | 179 | 67.807 | 91.051 | 79.567 | 1.00 | 99.69 | B |
| ATOM | 2347 | NZ | LYS | B | 179 | 69.226 | 90.645 | 79.770 | 1.00 | 99.69 | B |
| ATOM | 2348 | C | LYS | B | 179 | 64.548 | 94.587 | 75.503 | 1.00 | 93.31 | B |
| ATOM | 2349 | O | LYS | B | 179 | 64.225 | 94.246 | 74.364 | 1.00 | 93.31 | B |
| ATOM | 2350 | N | ARG | B | 180 | 64.905 | 95.830 | 75.811 | 1.00 | 100.00 | B |
| ATOM | 2351 | CA | ARG | B | 180 | 64.962 | 96.881 | 74.802 | 1.00 | 100.00 | B |
| ATOM | 2352 | CB | ARG | B | 180 | 65.285 | 98.229 | 75.460 | 1.00 | 89.36 | B |
| ATOM | 2353 | CG | ARG | B | 180 | 65.024 | 99.444 | 74.580 | 1.00 | 89.36 | B |
| ATOM | 2354 | CD | ARG | B | 180 | 65.872 | 100.654 | 74.989 | 1.00 | 89.36 | B |
| ATOM | 2355 | NE | ARG | B | 180 | 65.615 | 101.150 | 76.343 | 1.00 | 89.36 | B |
| ATOM | 2356 | CZ | ARG | B | 180 | 64.507 | 101.778 | 76.728 | 1.00 | 89.36 | B |
| ATOM | 2357 | NH1 | ARG | B | 180 | 63.521 | 101.998 | 75.867 | 1.00 | 89.36 | B |
| ATOM | 2358 | NH2 | ARG | B | 180 | 64.388 | 102.204 | 77.978 | 1.00 | 89.36 | B |
| ATOM | 2359 | C | ARG | B | 180 | 66.079 | 96.504 | 73.835 | 1.00 | 100.00 | B |
| ATOM | 2360 | O | ARG | B | 180 | 66.893 | 95.628 | 74.131 | 1.00 | 100.00 | B |
| ATOM | 2361 | N | HIS | B | 181 | 66.115 | 97.155 | 72.678 | 1.00 | 99.13 | B |
| ATOM | 2362 | CA | HIS | B | 181 | 67.155 | 96.888 | 71.689 | 1.00 | 99.13 | B |
| ATOM | 2363 | CB | HIS | B | 181 | 68.531 | 97.000 | 72.348 | 1.00 | 100.00 | B |
| ATOM | 2364 | CG | HIS | B | 181 | 68.758 | 98.306 | 73.044 | 1.00 | 100.00 | B |
| ATOM | 2365 | CD2 | HIS | B | 181 | 68.160 | 99.512 | 72.894 | 1.00 | 100.00 | B |
| ATOM | 2366 | ND1 | HIS | B | 181 | 69.708 | 98.470 | 74.030 | 1.00 | 100.00 | B |
| ATOM | 2367 | CE1 | HIS | B | 181 | 69.683 | 99.720 | 74.459 | 1.00 | 100.00 | B |
| ATOM | 2368 | NE2 | HIS | B | 181 | 68.752 | 100.373 | 73.786 | 1.00 | 100.00 | B |
| ATOM | 2369 | C | HIS | B | 181 | 67.005 | 95.519 | 71.034 | 1.00 | 99.13 | B |
| ATOM | 2370 | O | HIS | B | 181 | 67.937 | 95.022 | 70.403 | 1.00 | 99.13 | B |
| ATOM | 2371 | N | GLN | B | 182 | 65.832 | 94.913 | 71.185 | 1.00 | 99.52 | B |
| ATOM | 2372 | CA | GLN | B | 182 | 65.567 | 93.609 | 70.589 | 1.00 | 99.52 | B |
| ATOM | 2373 | CB | GLN | B | 182 | 65.279 | 92.576 | 71.674 | 1.00 | 100.00 | B |
| ATOM | 2374 | CG | GLN | B | 182 | 66.446 | 92.349 | 72.615 | 1.00 | 100.00 | B |
| ATOM | 2375 | CD | GLN | B | 182 | 66.240 | 91.150 | 73.514 | 1.00 | 100.00 | B |
| ATOM | 2376 | OE1 | GLN | B | 182 | 65.276 | 91.087 | 74.281 | 1.00 | 100.00 | B |
| ATOM | 2377 | NE2 | GLN | B | 182 | 67.149 | 90.185 | 73.424 | 1.00 | 100.00 | B |
| ATOM | 2378 | C | GLN | B | 182 | 64.394 | 93.687 | 69.619 | 1.00 | 99.52 | B |
| ATOM | 2379 | O | GLN | B | 182 | 63.264 | 93.978 | 70.010 | 1.00 | 99.52 | B |
| ATOM | 2380 | N | LYS | B | 183 | 64.682 | 93.415 | 68.352 | 1.00 | 97.95 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 2381 | CA | LYS | B | 183 | 63.693 | 93.469 | 67.285 | 1.00 | 97.95 | B |
| ATOM | 2382 | CB | LYS | B | 183 | 64.179 | 92.652 | 66.079 | 1.00 | 100.00 | B |
| ATOM | 2383 | CG | LYS | B | 183 | 65.331 | 93.306 | 65.306 | 1.00 | 100.00 | B |
| ATOM | 2384 | CD | LYS | B | 183 | 65.524 | 92.667 | 63.929 | 1.00 | 100.00 | B |
| ATOM | 2385 | CE | LYS | B | 183 | 66.523 | 93.446 | 63.073 | 1.00 | 100.00 | B |
| ATOM | 2386 | NZ | LYS | B | 183 | 66.572 | 92.945 | 61.666 | 1.00 | 100.00 | B |
| ATOM | 2387 | C | LYS | B | 183 | 62.257 | 93.072 | 67.623 | 1.00 | 97.95 | B |
| ATOM | 2388 | O | LYS | B | 183 | 61.322 | 93.648 | 67.070 | 1.00 | 97.95 | B |
| ATOM | 2389 | N | PHE | B | 184 | 62.057 | 92.108 | 68.518 | 1.00 | 79.35 | B |
| ATOM | 2390 | CA | PHE | B | 184 | 60.687 | 91.709 | 68.840 | 1.00 | 79.35 | B |
| ATOM | 2391 | CB | PHE | B | 184 | 60.639 | 90.276 | 69.407 | 1.00 | 99.94 | B |
| ATOM | 2392 | CG | PHE | B | 184 | 61.534 | 90.043 | 70.595 | 1.00 | 99.94 | B |
| ATOM | 2393 | CD1 | PHE | B | 184 | 62.917 | 89.946 | 70.441 | 1.00 | 99.94 | B |
| ATOM | 2394 | CD2 | PHE | B | 184 | 60.991 | 89.890 | 71.870 | 1.00 | 99.94 | B |
| ATOM | 2395 | CE1 | PHE | B | 184 | 63.744 | 89.695 | 71.539 | 1.00 | 99.94 | B |
| ATOM | 2396 | CE2 | PHE | B | 184 | 61.809 | 89.640 | 72.974 | 1.00 | 99.94 | B |
| ATOM | 2397 | CZ | PHE | B | 184 | 63.187 | 89.542 | 72.809 | 1.00 | 99.94 | B |
| ATOM | 2398 | C | PHE | B | 184 | 59.947 | 92.678 | 69.771 | 1.00 | 79.35 | B |
| ATOM | 2399 | O | PHE | B | 184 | 58.732 | 92.570 | 69.951 | 1.00 | 79.35 | B |
| ATOM | 2400 | N | THR | B | 185 | 60.674 | 93.632 | 70.348 | 1.00 | 100.00 | B |
| ATOM | 2401 | CA | THR | B | 185 | 60.067 | 94.620 | 71.240 | 1.00 | 100.00 | B |
| ATOM | 2402 | CB | THR | B | 185 | 60.911 | 94.829 | 72.514 | 1.00 | 99.28 | B |
| ATOM | 2403 | OG1 | THR | B | 185 | 62.194 | 95.360 | 72.156 | 1.00 | 99.28 | B |
| ATOM | 2404 | CG2 | THR | B | 185 | 61.093 | 93.513 | 73.258 | 1.00 | 99.28 | B |
| ATOM | 2405 | C | THR | B | 185 | 59.952 | 95.966 | 70.531 | 1.00 | 100.00 | B |
| ATOM | 2406 | O | THR | B | 185 | 59.541 | 96.961 | 71.130 | 1.00 | 100.00 | B |
| ATOM | 2407 | N | HIS | B | 186 | 60.317 | 95.980 | 69.251 | 1.00 | 80.24 | B |
| ATOM | 2408 | CA | HIS | B | 186 | 60.284 | 97.192 | 68.439 | 1.00 | 80.24 | B |
| ATOM | 2409 | CB | HIS | B | 186 | 61.568 | 97.296 | 67.617 | 1.00 | 86.10 | B |
| ATOM | 2410 | CG | HIS | B | 186 | 62.816 | 97.258 | 68.442 | 1.00 | 86.10 | B |
| ATOM | 2411 | CD2 | HIS | B | 186 | 63.000 | 97.110 | 69.776 | 1.00 | 86.10 | B |
| ATOM | 2412 | ND1 | HIS | B | 186 | 64.074 | 97.380 | 67.893 | 1.00 | 86.10 | B |
| ATOM | 2413 | CE1 | HIS | B | 186 | 64.980 | 97.309 | 68.853 | 1.00 | 86.10 | B |
| ATOM | 2414 | NE2 | HIS | B | 186 | 64.354 | 97.145 | 70.005 | 1.00 | 86.10 | B |
| ATOM | 2415 | C | HIS | B | 186 | 59.079 | 97.241 | 67.508 | 1.00 | 80.24 | B |
| ATOM | 2416 | O | HIS | B | 186 | 58.871 | 96.344 | 66.685 | 1.00 | 80.24 | B |
| ATOM | 2417 | N | PHE | B | 187 | 58.284 | 98.298 | 67.642 | 1.00 | 64.76 | B |
| ATOM | 2418 | CA | PHE | B | 187 | 57.103 | 98.454 | 66.813 | 1.00 | 64.76 | B |
| ATOM | 2419 | CB | PHE | B | 187 | 55.835 | 98.348 | 67.657 | 1.00 | 68.83 | B |
| ATOM | 2420 | CG | PHE | B | 187 | 55.606 | 96.985 | 68.232 | 1.00 | 68.83 | B |
| ATOM | 2421 | CD1 | PHE | B | 187 | 56.423 | 96.496 | 69.249 | 1.00 | 68.83 | B |
| ATOM | 2422 | CD2 | PHE | B | 187 | 54.570 | 96.185 | 67.758 | 1.00 | 68.83 | B |
| ATOM | 2423 | CE1 | PHE | B | 187 | 56.209 | 95.229 | 69.786 | 1.00 | 68.83 | B |
| ATOM | 2424 | CE2 | PHE | B | 187 | 54.347 | 94.914 | 68.289 | 1.00 | 68.83 | B |
| ATOM | 2425 | CZ | PHE | B | 187 | 55.167 | 94.436 | 69.304 | 1.00 | 68.83 | B |
| ATOM | 2426 | C | PHE | B | 187 | 57.099 | 99.770 | 66.054 | 1.00 | 64.76 | B |
| ATOM | 2427 | O | PHE | B | 187 | 57.579 | 100.797 | 66.542 | 1.00 | 64.76 | B |
| ATOM | 2428 | N | LEU | B | 188 | 56.542 | 99.718 | 64.850 | 1.00 | 62.18 | B |
| ATOM | 2429 | CA | LEU | B | 188 | 56.456 | 100.875 | 63.981 | 1.00 | 62.18 | B |
| ATOM | 2430 | CB | LEU | B | 188 | 57.089 | 100.555 | 62.625 | 1.00 | 63.11 | B |
| ATOM | 2431 | CG | LEU | B | 188 | 56.835 | 101.541 | 61.488 | 1.00 | 63.11 | B |
| ATOM | 2432 | CD1 | LEU | B | 188 | 57.459 | 102.884 | 61.823 | 1.00 | 63.11 | B |
| ATOM | 2433 | CD2 | LEU | B | 188 | 57.406 | 100.977 | 60.197 | 1.00 | 63.11 | B |
| ATOM | 2434 | C | LEU | B | 188 | 55.009 | 101.291 | 63.776 | 1.00 | 62.18 | B |
| ATOM | 2435 | O | LEU | B | 188 | 54.206 | 100.548 | 63.217 | 1.00 | 62.18 | B |
| ATOM | 2436 | N | PRO | B | 189 | 54.651 | 102.486 | 64.245 | 1.00 | 54.68 | B |
| ATOM | 2437 | CD | PRO | B | 189 | 55.379 | 103.405 | 65.135 | 1.00 | 51.12 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 2438 | CA | PRO | B | 189 | 53.267 | 102.913 | 64.053 | 1.00 | 54.68 | B |
| ATOM | 2439 | CB | PRO | B | 189 | 53.173 | 104.176 | 64.901 | 1.00 | 51.12 | B |
| ATOM | 2440 | CG | PRO | B | 189 | 54.262 | 103.981 | 65.949 | 1.00 | 51.12 | B |
| ATOM | 2441 | C | PRO | B | 189 | 53.106 | 103.206 | 62.567 | 1.00 | 54.68 | B |
| ATOM | 2442 | O | PRO | B | 189 | 53.826 | 104.040 | 62.018 | 1.00 | 54.68 | B |
| ATOM | 2443 | N | ARG | B | 190 | 52.185 | 102.509 | 61.915 | 1.00 | 58.99 | B |
| ATOM | 2444 | CA | ARG | B | 190 | 51.957 | 102.712 | 60.491 | 1.00 | 58.99 | B |
| ATOM | 2445 | CB | ARG | B | 190 | 51.990 | 101.370 | 59.746 | 1.00 | 52.79 | B |
| ATOM | 2446 | CG | ARG | B | 190 | 53.355 | 100.690 | 59.722 | 1.00 | 52.79 | B |
| ATOM | 2447 | CD | ARG | B | 190 | 53.365 | 99.514 | 58.742 | 1.00 | 52.79 | B |
| ATOM | 2448 | NE | ARG | B | 190 | 52.927 | 99.934 | 57.414 | 1.00 | 52.79 | B |
| ATOM | 2449 | CZ | ARG | B | 190 | 51.954 | 99.342 | 56.729 | 1.00 | 52.79 | B |
| ATOM | 2450 | NH1 | ARG | B | 190 | 51.319 | 98.296 | 57.241 | 1.00 | 52.79 | B |
| ATOM | 2451 | NH2 | ARG | B | 190 | 51.596 | 99.813 | 55.542 | 1.00 | 52.79 | B |
| ATOM | 2452 | C | ARG | B | 190 | 50.619 | 103.401 | 60.257 | 1.00 | 58.99 | B |
| ATOM | 2453 | O | ARG | B | 190 | 49.707 | 103.300 | 61.068 | 1.00 | 58.99 | B |
| ATOM | 2454 | N | PRO | B | 191 | 50.489 | 104.116 | 59.135 | 1.00 | 67.02 | B |
| ATOM | 2455 | CD | PRO | B | 191 | 51.515 | 104.360 | 58.108 | 1.00 | 45.04 | B |
| ATOM | 2456 | CA | PRO | B | 191 | 49.255 | 104.821 | 58.801 | 1.00 | 67.02 | B |
| ATOM | 2457 | CB | PRO | B | 191 | 49.708 | 105.784 | 57.714 | 1.00 | 45.04 | B |
| ATOM | 2458 | CG | PRO | B | 191 | 50.708 | 104.985 | 56.991 | 1.00 | 45.04 | B |
| ATOM | 2459 | C | PRO | B | 191 | 48.174 | 103.869 | 58.311 | 1.00 | 67.02 | B |
| ATOM | 2460 | O | PRO | B | 191 | 48.447 | 102.719 | 57.972 | 1.00 | 67.02 | B |
| ATOM | 2461 | N | VAL | B | 192 | 46.942 | 104.351 | 58.274 | 1.00 | 60.09 | B |
| ATOM | 2462 | CA | VAL | B | 192 | 45.843 | 103.528 | 57.814 | 1.00 | 60.09 | B |
| ATOM | 2463 | CB | VAL | B | 192 | 44.784 | 103.350 | 58.912 | 1.00 | 63.89 | B |
| ATOM | 2464 | CG1 | VAL | B | 192 | 43.629 | 102.525 | 58.390 | 1.00 | 63.89 | B |
| ATOM | 2465 | CG2 | VAL | B | 192 | 45.402 | 102.668 | 60.113 | 1.00 | 63.89 | B |
| ATOM | 2466 | C | VAL | B | 192 | 45.201 | 104.159 | 56.589 | 1.00 | 60.09 | B |
| ATOM | 2467 | O | VAL | B | 192 | 44.847 | 105.342 | 56.590 | 1.00 | 60.09 | B |
| ATOM | 2468 | N | ASP | B | 193 | 45.077 | 103.362 | 55.534 | 1.00 | 60.03 | B |
| ATOM | 2469 | CA | ASP | B | 193 | 44.471 | 103.813 | 54.292 | 1.00 | 60.03 | B |
| ATOM | 2470 | CB | ASP | B | 193 | 44.914 | 102.907 | 53.142 | 1.00 | 83.98 | B |
| ATOM | 2471 | CG | ASP | B | 193 | 44.253 | 103.259 | 51.824 | 1.00 | 83.98 | B |
| ATOM | 2472 | OD1 | ASP | B | 193 | 44.487 | 102.523 | 50.847 | 1.00 | 83.98 | B |
| ATOM | 2473 | OD2 | ASP | B | 193 | 43.506 | 104.260 | 51.756 | 1.00 | 83.98 | B |
| ATOM | 2474 | C | ASP | B | 193 | 42.965 | 103.724 | 54.478 | 1.00 | 60.03 | B |
| ATOM | 2475 | O | ASP | B | 193 | 42.434 | 102.656 | 54.774 | 1.00 | 60.03 | B |
| ATOM | 2476 | N | PRO | B | 194 | 42.254 | 104.849 | 54.313 | 1.00 | 84.27 | B |
| ATOM | 2477 | CD | PRO | B | 194 | 42.729 | 106.179 | 53.889 | 1.00 | 72.99 | B |
| ATOM | 2478 | CA | PRO | B | 194 | 40.797 | 104.832 | 54.479 | 1.00 | 84.27 | B |
| ATOM | 2479 | CB | PRO | B | 194 | 40.409 | 106.293 | 54.244 | 1.00 | 72.99 | B |
| ATOM | 2480 | CG | PRO | B | 194 | 41.484 | 106.785 | 53.295 | 1.00 | 72.99 | B |
| ATOM | 2481 | C | PRO | B | 194 | 40.095 | 103.867 | 53.518 | 1.00 | 84.27 | B |
| ATOM | 2482 | O | PRO | B | 194 | 39.174 | 103.147 | 53.908 | 1.00 | 84.27 | B |
| ATOM | 2483 | N | ASP | B | 195 | 40.546 | 103.853 | 52.267 | 1.00 | 83.93 | B |
| ATOM | 2484 | CA | ASP | B | 195 | 39.971 | 102.992 | 51.237 | 1.00 | 83.93 | B |
| ATOM | 2485 | CB | ASP | B | 195 | 40.694 | 103.207 | 49.907 | 1.00 | 100.00 | B |
| ATOM | 2486 | CG | ASP | B | 195 | 40.795 | 104.668 | 49.526 | 1.00 | 100.00 | B |
| ATOM | 2487 | OD1 | ASP | B | 195 | 39.737 | 105.313 | 49.358 | 1.00 | 100.00 | B |
| ATOM | 2488 | OD2 | ASP | B | 195 | 41.935 | 105.169 | 49.395 | 1.00 | 100.00 | B |
| ATOM | 2489 | C | ASP | B | 195 | 40.062 | 101.514 | 51.605 | 1.00 | 83.93 | B |
| ATOM | 2490 | O | ASP | B | 195 | 39.159 | 100.736 | 51.305 | 1.00 | 83.93 | B |
| ATOM | 2491 | N | LYS | B | 196 | 41.160 | 101.128 | 52.248 | 1.00 | 73.50 | B |
| ATOM | 2492 | CA | LYS | B | 196 | 41.361 | 99.740 | 52.633 | 1.00 | 73.50 | B |
| ATOM | 2493 | CB | LYS | B | 196 | 42.852 | 99.465 | 52.826 | 1.00 | 99.37 | B |
| ATOM | 2494 | CG | LYS | B | 196 | 43.630 | 99.418 | 51.525 | 1.00 | 99.37 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 2495 | CD | LYS | B | 196 | 45.082 | 99.037 | 51.760 | 1.00 | 99.37 | B |
| ATOM | 2496 | CE | LYS | B | 196 | 45.789 | 98.742 | 50.446 | 1.00 | 99.37 | B |
| ATOM | 2497 | NZ | LYS | B | 196 | 45.161 | 97.591 | 49.733 | 1.00 | 99.37 | B |
| ATOM | 2498 | C | LYS | B | 196 | 40.585 | 99.311 | 53.873 | 1.00 | 73.50 | B |
| ATOM | 2499 | O | LYS | B | 196 | 40.554 | 98.129 | 54.211 | 1.00 | 73.50 | B |
| ATOM | 2500 | N | VAL | B | 197 | 39.954 | 100.269 | 54.547 | 1.00 | 99.89 | B |
| ATOM | 2501 | CA | VAL | B | 197 | 39.169 | 99.972 | 55.743 | 1.00 | 99.89 | B |
| ATOM | 2502 | CB | VAL | B | 197 | 39.764 | 100.667 | 56.988 | 1.00 | 99.57 | B |
| ATOM | 2503 | CG1 | VAL | B | 197 | 41.059 | 99.978 | 57.403 | 1.00 | 99.57 | B |
| ATOM | 2504 | CG2 | VAL | B | 197 | 40.025 | 102.136 | 56.687 | 1.00 | 99.57 | B |
| ATOM | 2505 | C | VAL | B | 197 | 37.718 | 100.415 | 55.553 | 1.00 | 99.89 | B |
| ATOM | 2506 | O | VAL | B | 197 | 37.332 | 101.516 | 55.943 | 1.00 | 99.89 | B |
| ATOM | 2507 | N | PRO | B | 198 | 36.893 | 99.549 | 54.950 | 1.00 | 82.81 | B |
| ATOM | 2508 | CD | PRO | B | 198 | 37.264 | 98.203 | 54.477 | 1.00 | 78.19 | B |
| ATOM | 2509 | CA | PRO | B | 198 | 35.477 | 99.821 | 54.687 | 1.00 | 82.81 | B |
| ATOM | 2510 | CB | PRO | B | 198 | 35.045 | 98.609 | 53.862 | 1.00 | 78.19 | B |
| ATOM | 2511 | CG | PRO | B | 198 | 35.927 | 97.518 | 54.383 | 1.00 | 78.19 | B |
| ATOM | 2512 | C | PRO | B | 198 | 34.602 | 100.035 | 55.925 | 1.00 | 82.81 | B |
| ATOM | 2513 | O | PRO | B | 198 | 33.521 | 100.616 | 55.832 | 1.00 | 82.81 | B |
| ATOM | 2514 | N | GLU | B | 199 | 35.065 | 99.570 | 57.079 | 1.00 | 99.54 | B |
| ATOM | 2515 | CA | GLU | B | 199 | 34.305 | 99.731 | 58.317 | 1.00 | 99.54 | B |
| ATOM | 2516 | CB | GLU | B | 199 | 34.568 | 98.545 | 59.245 | 1.00 | 100.00 | B |
| ATOM | 2517 | CG | GLU | B | 199 | 34.128 | 97.214 | 58.665 | 1.00 | 100.00 | B |
| ATOM | 2518 | CD | GLU | B | 199 | 32.638 | 97.177 | 58.378 | 1.00 | 100.00 | B |
| ATOM | 2519 | OE1 | GLU | B | 199 | 31.846 | 97.254 | 59.344 | 1.00 | 100.00 | B |
| ATOM | 2520 | OE2 | GLU | B | 199 | 32.261 | 97.077 | 57.189 | 1.00 | 100.00 | B |
| ATOM | 2521 | C | GLU | B | 199 | 34.704 | 101.030 | 59.008 | 1.00 | 99.54 | B |
| ATOM | 2522 | O | GLU | B | 199 | 35.006 | 101.048 | 60.205 | 1.00 | 99.54 | B |
| ATOM | 2523 | N | LEU | B | 200 | 34.689 | 102.119 | 58.247 | 1.00 | 78.12 | B |
| ATOM | 2524 | CA | LEU | B | 200 | 35.084 | 103.418 | 58.768 | 1.00 | 78.12 | B |
| ATOM | 2525 | CB | LEU | B | 200 | 36.532 | 103.716 | 58.340 | 1.00 | 69.43 | B |
| ATOM | 2526 | CG | LEU | B | 200 | 37.188 | 105.059 | 58.688 | 1.00 | 69.43 | B |
| ATOM | 2527 | CD1 | LEU | B | 200 | 38.649 | 104.833 | 59.068 | 1.00 | 69.43 | B |
| ATOM | 2528 | CD2 | LEU | B | 200 | 37.066 | 106.014 | 57.509 | 1.00 | 69.43 | B |
| ATOM | 2529 | C | LEU | B | 200 | 34.156 | 104.529 | 58.303 | 1.00 | 78.12 | B |
| ATOM | 2530 | O | LEU | B | 200 | 34.094 | 105.590 | 58.921 | 1.00 | 78.12 | B |
| ATOM | 2531 | N | TYR | B | 201 | 33.437 | 104.292 | 57.211 | 1.00 | 90.96 | B |
| ATOM | 2532 | CA | TYR | B | 201 | 32.522 | 105.302 | 56.696 | 1.00 | 90.96 | B |
| ATOM | 2533 | CB | TYR | B | 201 | 32.059 | 104.934 | 55.279 | 1.00 | 88.44 | B |
| ATOM | 2534 | CG | TYR | B | 201 | 31.016 | 103.834 | 55.196 | 1.00 | 88.44 | B |
| ATOM | 2535 | CD1 | TYR | B | 201 | 29.654 | 104.123 | 55.318 | 1.00 | 88.44 | B |
| ATOM | 2536 | CE1 | TYR | B | 201 | 28.687 | 103.116 | 55.225 | 1.00 | 88.44 | B |
| ATOM | 2537 | CD2 | TYR | B | 201 | 31.388 | 102.507 | 54.983 | 1.00 | 88.44 | B |
| ATOM | 2538 | CE2 | TYR | B | 201 | 30.432 | 101.491 | 54.889 | 1.00 | 88.44 | B |
| ATOM | 2539 | CZ | TYR | B | 201 | 29.085 | 101.800 | 55.009 | 1.00 | 88.44 | B |
| ATOM | 2540 | OH | TYR | B | 201 | 28.141 | 100.796 | 54.906 | 1.00 | 88.44 | B |
| ATOM | 2541 | C | TYR | B | 201 | 31.339 | 105.398 | 57.651 | 1.00 | 90.96 | B |
| ATOM | 2542 | O | TYR | B | 201 | 30.586 | 106.370 | 57.633 | 1.00 | 90.96 | B |
| ATOM | 2543 | N | LYS | B | 202 | 31.197 | 104.378 | 58.494 | 1.00 | 87.19 | B |
| ATOM | 2544 | CA | LYS | B | 202 | 30.124 | 104.322 | 59.479 | 1.00 | 87.19 | B |
| ATOM | 2545 | CB | LYS | B | 202 | 30.031 | 102.915 | 60.069 | 1.00 | 99.99 | B |
| ATOM | 2546 | CG | LYS | B | 202 | 29.805 | 101.827 | 59.033 | 1.00 | 99.99 | B |
| ATOM | 2547 | CD | LYS | B | 202 | 29.721 | 100.452 | 59.679 | 1.00 | 99.99 | B |
| ATOM | 2548 | CE | LYS | B | 202 | 29.500 | 99.363 | 58.640 | 1.00 | 99.99 | B |
| ATOM | 2549 | NZ | LYS | B | 202 | 30.612 | 99.310 | 57.647 | 1.00 | 99.99 | B |
| ATOM | 2550 | C | LYS | B | 202 | 30.398 | 105.329 | 60.591 | 1.00 | 87.19 | B |
| ATOM | 2551 | O | LYS | B | 202 | 29.474 | 105.849 | 61.220 | 1.00 | 87.19 | B |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 2552 | N | ASP | B | 203 | 31.677 | 105.600 | 60.827 | 1.00 | 98.64 | B |
| ATOM | 2553 | CA | ASP | B | 203 | 32.076 | 106.548 | 61.856 | 1.00 | 98.64 | B |
| ATOM | 2554 | CB | ASP | B | 203 | 33.397 | 106.111 | 62.494 | 1.00 | 91.68 | B |
| ATOM | 2555 | CG | ASP | B | 203 | 33.460 | 104.613 | 62.739 | 1.00 | 91.68 | B |
| ATOM | 2556 | OD1 | ASP | B | 203 | 32.495 | 104.055 | 63.302 | 1.00 | 91.68 | B |
| ATOM | 2557 | OD2 | ASP | B | 203 | 34.480 | 103.992 | 62.371 | 1.00 | 91.68 | B |
| ATOM | 2558 | C | ASP | B | 203 | 32.243 | 107.921 | 61.222 | 1.00 | 98.64 | B |
| ATOM | 2559 | O | ASP | B | 203 | 32.531 | 108.899 | 61.911 | 1.00 | 98.64 | B |
| ATOM | 2560 | N | ILE | B | 204 | 32.054 | 107.986 | 59.906 | 1.00 | 81.26 | B |
| ATOM | 2561 | CA | ILE | B | 204 | 32.197 | 109.237 | 59.163 | 1.00 | 81.26 | B |
| ATOM | 2562 | CB | ILE | B | 204 | 33.100 | 109.058 | 57.923 | 1.00 | 98.99 | B |
| ATOM | 2563 | CG2 | ILE | B | 204 | 33.205 | 110.373 | 57.167 | 1.00 | 98.99 | B |
| ATOM | 2564 | CG1 | ILE | B | 204 | 34.481 | 108.543 | 58.337 | 1.00 | 98.99 | B |
| ATOM | 2565 | CD1 | ILE | B | 204 | 35.263 | 109.491 | 59.213 | 1.00 | 98.99 | B |
| ATOM | 2566 | C | ILE | B | 204 | 30.859 | 109.769 | 58.665 | 1.00 | 81.26 | B |
| ATOM | 2567 | O | ILE | B | 204 | 30.500 | 110.918 | 58.915 | 1.00 | 81.26 | B |
| ATOM | 2568 | N | LEU | B | 205 | 30.133 | 108.924 | 57.944 | 1.00 | 91.26 | B |
| ATOM | 2569 | CA | LEU | B | 205 | 28.840 | 109.294 | 57.382 | 1.00 | 91.26 | B |
| ATOM | 2570 | CB | LEU | B | 205 | 28.570 | 108.461 | 56.129 | 1.00 | 88.77 | B |
| ATOM | 2571 | CG | LEU | B | 205 | 29.624 | 108.529 | 55.025 | 1.00 | 88.77 | B |
| ATOM | 2572 | CD1 | LEU | B | 205 | 29.351 | 107.437 | 54.000 | 1.00 | 88.77 | B |
| ATOM | 2573 | CD2 | LEU | B | 205 | 29.608 | 109.909 | 54.383 | 1.00 | 88.77 | B |
| ATOM | 2574 | C | LEU | B | 205 | 27.698 | 109.096 | 58.372 | 1.00 | 91.26 | B |
| ATOM | 2575 | O | LEU | B | 205 | 27.686 | 108.133 | 59.140 | 1.00 | 91.26 | B |
| ATOM | 2576 | N | SER | B | 206 | 26.736 | 110.011 | 58.352 | 1.00 | 82.87 | B |
| ATOM | 2577 | CA | SER | B | 206 | 25.596 | 109.894 | 59.245 | 1.00 | 82.87 | B |
| ATOM | 2578 | CB | SER | B | 206 | 24.750 | 111.167 | 59.209 | 1.00 | 68.58 | B |
| ATOM | 2579 | OG | SER | B | 206 | 24.209 | 111.391 | 57.923 | 1.00 | 68.58 | B |
| ATOM | 2580 | C | SER | B | 206 | 24.786 | 108.702 | 58.761 | 1.00 | 82.87 | B |
| ATOM | 2581 | O | SER | B | 206 | 24.778 | 108.396 | 57.570 | 1.00 | 82.87 | B |
| ATOM | 2582 | N | GLN | B | 207 | 24.115 | 108.020 | 59.679 | 1.00 | 90.75 | B |
| ATOM | 2583 | CA | GLN | B | 207 | 23.322 | 106.854 | 59.317 | 1.00 | 90.75 | B |
| ATOM | 2584 | CB | GLN | B | 207 | 22.894 | 106.115 | 60.587 | 1.00 | 100.00 | B |
| ATOM | 2585 | CG | GLN | B | 207 | 22.140 | 104.821 | 60.349 | 1.00 | 100.00 | B |
| ATOM | 2586 | CD | GLN | B | 207 | 21.829 | 104.082 | 61.638 | 1.00 | 100.00 | B |
| ATOM | 2587 | OE1 | GLN | B | 207 | 21.131 | 103.066 | 61.632 | 1.00 | 100.00 | B |
| ATOM | 2588 | NE2 | GLN | B | 207 | 22.351 | 104.587 | 62.753 | 1.00 | 100.00 | B |
| ATOM | 2589 | C | GLN | B | 207 | 22.097 | 107.246 | 58.488 | 1.00 | 90.75 | B |
| ATOM | 2590 | O | GLN | B | 207 | 21.749 | 108.450 | 58.459 | 1.00 | 90.75 | B |
| ATOM | 2591 | OXT | GLN | B | 207 | 21.497 | 106.338 | 57.875 | 1.00 | 99.88 | B |
| ATOM | 2592 | CB | THR | C | 52 | 32.968 | 119.253 | 55.113 | 1.00 | 100.00 | C |
| ATOM | 2593 | OG1 | THR | C | 52 | 33.012 | 118.160 | 56.042 | 1.00 | 100.00 | C |
| ATOM | 2594 | CG2 | THR | C | 52 | 33.207 | 120.570 | 55.857 | 1.00 | 100.00 | C |
| ATOM | 2595 | C | THR | C | 52 | 31.499 | 118.066 | 53.456 | 1.00 | 99.97 | C |
| ATOM | 2596 | O | THR | C | 52 | 30.536 | 117.298 | 53.510 | 1.00 | 99.97 | C |
| ATOM | 2597 | N | THR | C | 52 | 30.479 | 119.295 | 55.385 | 1.00 | 99.97 | C |
| ATOM | 2598 | CA | THR | C | 52 | 31.594 | 119.273 | 54.396 | 1.00 | 99.97 | C |
| ATOM | 2599 | N | ASP | C | 53 | 32.506 | 117.909 | 52.598 | 1.00 | 100.00 | C |
| ATOM | 2600 | CA | ASP | C | 53 | 32.553 | 116.813 | 51.630 | 1.00 | 100.00 | C |
| ATOM | 2601 | CB | ASP | C | 53 | 33.302 | 117.272 | 50.376 | 1.00 | 100.00 | C |
| ATOM | 2602 | CG | ASP | C | 53 | 33.064 | 116.366 | 49.186 | 1.00 | 100.00 | C |
| ATOM | 2603 | OD1 | ASP | C | 53 | 33.748 | 116.557 | 48.156 | 1.00 | 100.00 | C |
| ATOM | 2604 | OD2 | ASP | C | 53 | 32.190 | 115.473 | 49.275 | 1.00 | 100.00 | C |
| ATOM | 2605 | C | ASP | C | 53 | 33.239 | 115.573 | 52.214 | 1.00 | 100.00 | C |
| ATOM | 2606 | O | ASP | C | 53 | 33.900 | 115.651 | 53.253 | 1.00 | 100.00 | C |
| ATOM | 2607 | N | LEU | C | 54 | 33.083 | 114.433 | 51.543 | 1.00 | 94.05 | C |
| ATOM | 2608 | CA | LEU | C | 54 | 33.689 | 113.183 | 52.004 | 1.00 | 94.05 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|---------|--------|------|--------|---|
| ATOM | 2609 | CB | LEU | C | 54 | 32.818 | 111.987 | 51.617 | 1.00 | 97.96 | C |
| ATOM | 2610 | CG | LEU | C | 54 | 33.439 | 110.619 | 51.915 | 1.00 | 97.96 | C |
| ATOM | 2611 | CD1 | LEU | C | 54 | 33.779 | 110.524 | 53.393 | 1.00 | 97.96 | C |
| ATOM | 2612 | CD2 | LEU | C | 54 | 32.479 | 109.516 | 51.511 | 1.00 | 97.96 | C |
| ATOM | 2613 | C | LEU | C | 54 | 35.087 | 112.980 | 51.435 | 1.00 | 94.05 | C |
| ATOM | 2614 | O | LEU | C | 54 | 35.987 | 112.497 | 52.125 | 1.00 | 94.05 | C |
| ATOM | 2615 | N | ASP | C | 55 | 35.258 | 113.335 | 50.166 | 1.00 | 89.17 | C |
| ATOM | 2616 | CA | ASP | C | 55 | 36.551 | 113.209 | 49.510 | 1.00 | 89.17 | C |
| ATOM | 2617 | CB | ASP | C | 55 | 36.431 | 113.662 | 48.056 | 1.00 | 100.00 | C |
| ATOM | 2618 | CG | ASP | C | 55 | 35.196 | 113.092 | 47.372 | 1.00 | 100.00 | C |
| ATOM | 2619 | OD1 | ASP | C | 55 | 35.071 | 111.850 | 47.296 | 1.00 | 100.00 | C |
| ATOM | 2620 | OD2 | ASP | C | 55 | 34.345 | 113.888 | 46.916 | 1.00 | 100.00 | C |
| ATOM | 2621 | C | ASP | C | 55 | 37.514 | 114.108 | 50.281 | 1.00 | 89.17 | C |
| ATOM | 2622 | O | ASP | C | 55 | 38.706 | 113.825 | 50.392 | 1.00 | 89.17 | C |
| ATOM | 2623 | N | HIS | C | 56 | 36.965 | 115.194 | 50.816 | 1.00 | 75.92 | C |
| ATOM | 2624 | CA | HIS | C | 56 | 37.714 | 116.159 | 51.611 | 1.00 | 75.92 | C |
| ATOM | 2625 | CB | HIS | C | 56 | 36.745 | 117.220 | 52.154 | 1.00 | 100.00 | C |
| ATOM | 2626 | CG | HIS | C | 56 | 37.360 | 118.182 | 53.124 | 1.00 | 100.00 | C |
| ATOM | 2627 | CD2 | HIS | C | 56 | 38.651 | 118.529 | 53.349 | 1.00 | 100.00 | C |
| ATOM | 2628 | ND1 | HIS | C | 56 | 36.604 | 118.940 | 53.995 | 1.00 | 100.00 | C |
| ATOM | 2629 | CE1 | HIS | C | 56 | 37.402 | 119.710 | 54.713 | 1.00 | 100.00 | C |
| ATOM | 2630 | NE2 | HIS | C | 56 | 38.649 | 119.480 | 54.341 | 1.00 | 100.00 | C |
| ATOM | 2631 | C | HIS | C | 56 | 38.370 | 115.420 | 52.774 | 1.00 | 75.92 | C |
| ATOM | 2632 | O | HIS | C | 56 | 39.580 | 115.502 | 52.986 | 1.00 | 75.92 | C |
| ATOM | 2633 | N | LEU | C | 57 | 37.551 | 114.684 | 53.514 | 1.00 | 68.76 | C |
| ATOM | 2634 | CA | LEU | C | 57 | 38.017 | 113.941 | 54.674 | 1.00 | 68.76 | C |
| ATOM | 2635 | CB | LEU | C | 57 | 36.823 | 113.378 | 55.442 | 1.00 | 80.51 | C |
| ATOM | 2636 | CG | LEU | C | 57 | 37.174 | 112.729 | 56.779 | 1.00 | 80.51 | C |
| ATOM | 2637 | CD1 | LEU | C | 57 | 37.923 | 113.723 | 57.660 | 1.00 | 80.51 | C |
| ATOM | 2638 | CD2 | LEU | C | 57 | 35.903 | 112.267 | 57.462 | 1.00 | 80.51 | C |
| ATOM | 2639 | C | LEU | C | 57 | 38.986 | 112.814 | 54.349 | 1.00 | 68.76 | C |
| ATOM | 2640 | O | LEU | C | 57 | 39.910 | 112.545 | 55.115 | 1.00 | 68.76 | C |
| ATOM | 2641 | N | LYS | C | 58 | 38.776 | 112.142 | 53.223 | 1.00 | 61.74 | C |
| ATOM | 2642 | CA | LYS | C | 58 | 39.668 | 111.049 | 52.851 | 1.00 | 61.74 | C |
| ATOM | 2643 | CB | LYS | C | 58 | 39.135 | 110.311 | 51.619 | 1.00 | 84.68 | C |
| ATOM | 2644 | CG | LYS | C | 58 | 37.715 | 109.800 | 51.806 | 1.00 | 84.68 | C |
| ATOM | 2645 | CD | LYS | C | 58 | 37.331 | 108.750 | 50.781 | 1.00 | 84.68 | C |
| ATOM | 2646 | CE | LYS | C | 58 | 37.964 | 107.407 | 51.101 | 1.00 | 84.68 | C |
| ATOM | 2647 | NZ | LYS | C | 58 | 37.508 | 106.360 | 50.146 | 1.00 | 84.68 | C |
| ATOM | 2648 | C | LYS | C | 58 | 41.058 | 111.611 | 52.588 | 1.00 | 61.74 | C |
| ATOM | 2649 | O | LYS | C | 58 | 42.060 | 110.956 | 52.872 | 1.00 | 61.74 | C |
| ATOM | 2650 | N | GLY | C | 59 | 41.102 | 112.836 | 52.063 | 1.00 | 57.71 | C |
| ATOM | 2651 | CA | GLY | C | 59 | 42.370 | 113.489 | 51.788 | 1.00 | 57.71 | C |
| ATOM | 2652 | C | GLY | C | 59 | 43.141 | 113.657 | 53.082 | 1.00 | 57.71 | C |
| ATOM | 2653 | O | GLY | C | 59 | 44.309 | 113.280 | 53.182 | 1.00 | 57.71 | C |
| ATOM | 2654 | N | ILE | C | 60 | 42.466 | 114.217 | 54.079 | 1.00 | 57.00 | C |
| ATOM | 2655 | CA | ILE | C | 60 | 43.039 | 114.435 | 55.399 | 1.00 | 57.00 | C |
| ATOM | 2656 | CB | ILE | C | 60 | 41.997 | 115.096 | 56.310 | 1.00 | 56.02 | C |
| ATOM | 2657 | CG2 | ILE | C | 60 | 42.558 | 115.296 | 57.706 | 1.00 | 56.02 | C |
| ATOM | 2658 | CG1 | ILE | C | 60 | 41.579 | 116.428 | 55.689 | 1.00 | 56.02 | C |
| ATOM | 2659 | CD1 | ILE | C | 60 | 40.350 | 117.025 | 56.286 | 1.00 | 56.02 | C |
| ATOM | 2660 | C | ILE | C | 60 | 43.503 | 113.113 | 56.013 | 1.00 | 57.00 | C |
| ATOM | 2661 | O | ILE | C | 60 | 44.468 | 113.076 | 56.776 | 1.00 | 57.00 | C |
| ATOM | 2662 | N | LEU | C | 61 | 42.813 | 112.029 | 55.677 | 1.00 | 59.72 | C |
| ATOM | 2663 | CA | LEU | C | 61 | 43.182 | 110.715 | 56.185 | 1.00 | 59.72 | C |
| ATOM | 2664 | CB | LEU | C | 61 | 42.000 | 109.742 | 56.071 | 1.00 | 56.09 | C |
| ATOM | 2665 | CG | LEU | C | 61 | 40.726 | 110.076 | 56.856 | 1.00 | 56.09 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|---------|--------|------|-------|---|
| ATOM | 2666 | CD1 | LEU | C | 61 | 39.705 | 108.981 | 56.667 | 1.00 | 56.09 | C |
| ATOM | 2667 | CD2 | LEU | C | 61 | 41.057 | 110.229 | 58.328 | 1.00 | 56.09 | C |
| ATOM | 2668 | C | LEU | C | 61 | 44.381 | 110.170 | 55.404 | 1.00 | 59.72 | C |
| ATOM | 2669 | O | LEU | C | 61 | 45.073 | 109.259 | 55.864 | 1.00 | 59.72 | C |
| ATOM | 2670 | N | ARG | C | 62 | 44.620 | 110.730 | 54.220 | 1.00 | 57.36 | C |
| ATOM | 2671 | CA | ARG | C | 62 | 45.740 | 110.302 | 53.384 | 1.00 | 57.36 | C |
| ATOM | 2672 | CB | ARG | C | 62 | 45.376 | 110.386 | 51.897 | 1.00 | 67.53 | C |
| ATOM | 2673 | CG | ARG | C | 62 | 44.179 | 109.547 | 51.501 | 1.00 | 67.53 | C |
| ATOM | 2674 | CD | ARG | C | 62 | 44.415 | 108.825 | 50.196 | 1.00 | 67.53 | C |
| ATOM | 2675 | NE | ARG | C | 62 | 43.243 | 108.058 | 49.779 | 1.00 | 67.53 | C |
| ATOM | 2676 | CZ | ARG | C | 62 | 42.127 | 108.597 | 49.291 | 1.00 | 67.53 | C |
| ATOM | 2677 | NH1 | ARG | C | 62 | 42.023 | 109.914 | 49.154 | 1.00 | 67.53 | C |
| ATOM | 2678 | NH2 | ARG | C | 62 | 41.116 | 107.818 | 48.934 | 1.00 | 67.53 | C |
| ATOM | 2679 | C | ARG | C | 62 | 46.992 | 111.137 | 53.645 | 1.00 | 57.36 | C |
| ATOM | 2680 | O | ARG | C | 62 | 47.933 | 111.119 | 52.853 | 1.00 | 57.36 | C |
| ATOM | 2681 | N | ARG | C | 63 | 46.996 | 111.867 | 54.757 | 1.00 | 47.93 | C |
| ATOM | 2682 | CA | ARG | C | 63 | 48.142 | 112.687 | 55.123 | 1.00 | 47.93 | C |
| ATOM | 2683 | CB | ARG | C | 63 | 47.704 | 113.846 | 56.013 | 1.00 | 49.06 | C |
| ATOM | 2684 | CG | ARG | C | 63 | 46.906 | 114.867 | 55.234 | 1.00 | 49.06 | C |
| ATOM | 2685 | CD | ARG | C | 63 | 46.564 | 116.077 | 56.056 | 1.00 | 49.06 | C |
| ATOM | 2686 | NE | ARG | C | 63 | 45.807 | 117.037 | 55.265 | 1.00 | 49.06 | C |
| ATOM | 2687 | CZ | ARG | C | 63 | 45.412 | 118.224 | 55.711 | 1.00 | 49.06 | C |
| ATOM | 2688 | NH1 | ARG | C | 63 | 45.700 | 118.606 | 56.950 | 1.00 | 49.06 | C |
| ATOM | 2689 | NH2 | ARG | C | 63 | 44.741 | 119.037 | 54.912 | 1.00 | 49.06 | C |
| ATOM | 2690 | C | ARG | C | 63 | 49.225 | 111.855 | 55.805 | 1.00 | 47.93 | C |
| ATOM | 2691 | O | ARG | C | 63 | 48.957 | 111.060 | 56.719 | 1.00 | 47.93 | C |
| ATOM | 2692 | N | ARG | C | 64 | 50.459 | 112.044 | 55.346 | 1.00 | 50.16 | C |
| ATOM | 2693 | CA | ARG | C | 64 | 51.576 | 111.286 | 55.873 | 1.00 | 50.16 | C |
| ATOM | 2694 | CB | ARG | C | 64 | 51.810 | 110.042 | 55.007 | 1.00 | 47.99 | C |
| ATOM | 2695 | CG | ARG | C | 64 | 50.556 | 109.303 | 54.600 | 1.00 | 47.99 | C |
| ATOM | 2696 | CD | ARG | C | 64 | 50.425 | 107.994 | 55.347 | 1.00 | 47.99 | C |
| ATOM | 2697 | NE | ARG | C | 64 | 49.260 | 107.231 | 54.901 | 1.00 | 47.99 | C |
| ATOM | 2698 | CZ | ARG | C | 64 | 47.998 | 107.552 | 55.171 | 1.00 | 47.99 | C |
| ATOM | 2699 | NH1 | ARG | C | 64 | 47.716 | 108.628 | 55.901 | 1.00 | 47.99 | C |
| ATOM | 2700 | NH2 | ARG | C | 64 | 47.014 | 106.799 | 54.695 | 1.00 | 47.99 | C |
| ATOM | 2701 | C | ARG | C | 64 | 52.851 | 112.100 | 55.867 | 1.00 | 50.16 | C |
| ATOM | 2702 | O | ARG | C | 64 | 52.871 | 113.251 | 55.446 | 1.00 | 50.16 | C |
| ATOM | 2703 | N | GLN | C | 65 | 53.909 | 111.465 | 56.360 | 1.00 | 41.79 | C |
| ATOM | 2704 | CA | GLN | C | 65 | 55.249 | 112.025 | 56.374 | 1.00 | 41.79 | C |
| ATOM | 2705 | CB | GLN | C | 65 | 55.822 | 112.089 | 57.792 | 1.00 | 50.64 | C |
| ATOM | 2706 | CG | GLN | C | 65 | 55.070 | 112.988 | 58.751 | 1.00 | 50.64 | C |
| ATOM | 2707 | CD | GLN | C | 65 | 55.856 | 113.264 | 60.030 | 1.00 | 50.64 | C |
| ATOM | 2708 | OE1 | GLN | C | 65 | 56.883 | 113.951 | 60.007 | 1.00 | 50.64 | C |
| ATOM | 2709 | NE2 | GLN | C | 65 | 55.378 | 112.723 | 61.151 | 1.00 | 50.64 | C |
| ATOM | 2710 | C | GLN | C | 65 | 56.017 | 110.979 | 55.566 | 1.00 | 41.79 | C |
| ATOM | 2711 | O | GLN | C | 65 | 55.709 | 109.788 | 55.638 | 1.00 | 41.79 | C |
| ATOM | 2712 | N | LEU | C | 66 | 56.987 | 111.410 | 54.773 | 1.00 | 42.83 | C |
| ATOM | 2713 | CA | LEU | C | 66 | 57.758 | 110.451 | 54.001 | 1.00 | 42.83 | C |
| ATOM | 2714 | CB | LEU | C | 66 | 57.852 | 110.855 | 52.531 | 1.00 | 44.65 | C |
| ATOM | 2715 | CG | LEU | C | 66 | 56.892 | 110.109 | 51.610 | 1.00 | 44.65 | C |
| ATOM | 2716 | CD1 | LEU | C | 66 | 57.176 | 110.499 | 50.169 | 1.00 | 44.65 | C |
| ATOM | 2717 | CD2 | LEU | C | 66 | 57.059 | 108.611 | 51.791 | 1.00 | 44.65 | C |
| ATOM | 2718 | C | LEU | C | 66 | 59.136 | 110.351 | 54.593 | 1.00 | 42.83 | C |
| ATOM | 2719 | O | LEU | C | 66 | 59.952 | 111.262 | 54.453 | 1.00 | 42.83 | C |
| ATOM | 2720 | N | TYR | C | 67 | 59.387 | 109.232 | 55.261 | 1.00 | 48.46 | C |
| ATOM | 2721 | CA | TYR | C | 67 | 60.671 | 109.007 | 55.896 | 1.00 | 48.46 | C |
| ATOM | 2722 | CB | TYR | C | 67 | 60.480 | 108.303 | 57.236 | 1.00 | 54.10 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 ~~Continued~~

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|---------|--------|------|-------|---|
| ATOM | 2723 | CG | TYR | C | 67 | 61.774 | 108.057 | 57.971 | 1.00 | 54.10 | C |
| ATOM | 2724 | CD1 | TYR | C | 67 | 62.508 | 109.115 | 58.507 | 1.00 | 54.10 | C |
| ATOM | 2725 | CE1 | TYR | C | 67 | 63.705 | 108.886 | 59.184 | 1.00 | 54.10 | C |
| ATOM | 2726 | CD2 | TYR | C | 67 | 62.272 | 106.762 | 58.128 | 1.00 | 54.10 | C |
| ATOM | 2727 | CE2 | TYR | C | 67 | 63.461 | 106.524 | 58.799 | 1.00 | 54.10 | C |
| ATOM | 2728 | CZ | TYR | C | 67 | 64.172 | 107.586 | 59.325 | 1.00 | 54.10 | C |
| ATOM | 2729 | OH | TYR | C | 67 | 65.348 | 107.345 | 59.993 | 1.00 | 54.10 | C |
| ATOM | 2730 | C | TYR | C | 67 | 61.601 | 108.185 | 55.017 | 1.00 | 48.46 | C |
| ATOM | 2731 | O | TYR | C | 67 | 61.342 | 107.012 | 54.737 | 1.00 | 48.46 | C |
| ATOM | 2732 | N | CYS | C | 68 | 62.682 | 108.820 | 54.581 | 1.00 | 46.82 | C |
| ATOM | 2733 | CA | CYS | C | 68 | 63.669 | 108.164 | 53.748 | 1.00 | 46.82 | C |
| ATOM | 2734 | CB | CYS | C | 68 | 64.490 | 109.212 | 53.000 | 1.00 | 54.28 | C |
| ATOM | 2735 | SG | CYS | C | 68 | 65.590 | 108.523 | 51.757 | 1.00 | 54.28 | C |
| ATOM | 2736 | C | CYS | C | 68 | 64.567 | 107.343 | 54.673 | 1.00 | 46.82 | C |
| ATOM | 2737 | O | CYS | C | 68 | 64.946 | 107.817 | 55.751 | 1.00 | 46.82 | C |
| ATOM | 2738 | N | ARG | C | 69 | 64.898 | 106.120 | 54.259 | 1.00 | 54.93 | C |
| ATOM | 2739 | CA | ARG | C | 69 | 65.743 | 105.243 | 55.063 | 1.00 | 54.93 | C |
| ATOM | 2740 | CB | ARG | C | 69 | 66.038 | 103.940 | 54.311 | 1.00 | 96.31 | C |
| ATOM | 2741 | CG | ARG | C | 69 | 66.932 | 102.972 | 55.079 | 1.00 | 96.31 | C |
| ATOM | 2742 | CD | ARG | C | 69 | 66.313 | 102.550 | 56.409 | 1.00 | 96.31 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|---------|--------|------|-------|---|
| ATOM | 2743 | NE | ARG | C | 69 | 67.327 | 102.373 | 57.450 | 1.00 | 96.31 | C |
| ATOM | 2744 | CZ | ARG | C | 69 | 68.270 | 101.435 | 57.440 | 1.00 | 96.31 | C |
| ATOM | 2745 | NH1 | ARG | C | 69 | 68.340 | 100.564 | 56.439 | 1.00 | 96.31 | C |
| ATOM | 2746 | NH2 | ARG | C | 69 | 69.157 | 101.377 | 58.426 | 1.00 | 96.31 | C |
| ATOM | 2747 | C | ARG | C | 69 | 67.049 | 105.947 | 55.437 | 1.00 | 54.93 | C |
| ATOM | 2748 | O | ARG | C | 69 | 67.742 | 105.559 | 56.381 | 1.00 | 54.93 | C |
| ATOM | 2749 | N | THR | C | 70 | 67.363 | 106.998 | 54.694 | 1.00 | 49.77 | C |
| ATOM | 2750 | CA | THR | C | 70 | 68.564 | 107.784 | 54.926 | 1.00 | 49.77 | C |
| ATOM | 2751 | CB | THR | C | 70 | 68.787 | 108.765 | 53.752 | 1.00 | 63.59 | C |
| ATOM | 2752 | OG1 | THR | C | 70 | 70.135 | 109.239 | 53.769 | 1.00 | 63.59 | C |
| ATOM | 2753 | CG2 | THR | C | 70 | 67.840 | 109.950 | 53.859 | 1.00 | 63.59 | C |
| ATOM | 2754 | C | THR | C | 70 | 68.442 | 108.561 | 56.246 | 1.00 | 49.77 | C |
| ATOM | 2755 | O | THR | C | 70 | 69.415 | 109.139 | 56.728 | 1.00 | 49.77 | C |
| ATOM | 2756 | N | GLY | C | 71 | 67.239 | 108.576 | 56.821 | 1.00 | 51.51 | C |
| ATOM | 2757 | CA | GLY | C | 71 | 67.014 | 109.270 | 58.078 | 1.00 | 51.51 | C |
| ATOM | 2758 | C | GLY | C | 71 | 66.345 | 110.633 | 57.986 | 1.00 | 51.51 | C |
| ATOM | 2759 | O | GLY | C | 71 | 66.274 | 111.357 | 58.981 | 1.00 | 51.51 | C |
| ATOM | 2760 | N | PHE | C | 72 | 65.846 | 110.994 | 56.807 | 1.00 | 48.91 | C |
| ATOM | 2761 | CA | PHE | C | 72 | 65.201 | 112.295 | 56.642 | 1.00 | 48.91 | C |
| ATOM | 2762 | CB | PHE | C | 72 | 66.019 | 113.194 | 55.719 | 1.00 | 54.63 | C |
| ATOM | 2763 | CG | PHE | C | 72 | 67.404 | 113.459 | 56.198 | 1.00 | 54.63 | C |
| ATOM | 2764 | CD1 | PHE | C | 72 | 68.395 | 112.496 | 56.066 | 1.00 | 54.63 | C |
| ATOM | 2765 | CD2 | PHE | C | 72 | 67.722 | 114.679 | 56.782 | 1.00 | 54.63 | C |
| ATOM | 2766 | CE1 | PHE | C | 72 | 69.688 | 112.748 | 56.508 | 1.00 | 54.63 | C |
| ATOM | 2767 | CE2 | PHE | C | 72 | 69.007 | 114.940 | 57.226 | 1.00 | 54.63 | C |
| ATOM | 2768 | CZ | PHE | C | 72 | 69.993 | 113.975 | 57.090 | 1.00 | 54.63 | C |
| ATOM | 2769 | C | PHE | C | 72 | 63.793 | 112.245 | 56.083 | 1.00 | 48.91 | C |
| ATOM | 2770 | O | PHE | C | 72 | 63.442 | 111.351 | 55.314 | 1.00 | 48.91 | C |
| ATOM | 2771 | N | HIS | C | 73 | 62.991 | 113.229 | 56.469 | 1.00 | 42.55 | C |
| ATOM | 2772 | CA | HIS | C | 73 | 61.629 | 113.344 | 55.970 | 1.00 | 42.55 | C |
| ATOM | 2773 | CB | HIS | C | 73 | 60.682 | 113.880 | 57.045 | 1.00 | 45.15 | C |
| ATOM | 2774 | CG | HIS | C | 73 | 60.388 | 112.905 | 58.138 | 1.00 | 45.15 | C |
| ATOM | 2775 | CD2 | HIS | C | 73 | 59.430 | 111.953 | 58.248 | 1.00 | 45.15 | C |
| ATOM | 2776 | ND1 | HIS | C | 73 | 61.127 | 112.843 | 59.299 | 1.00 | 45.15 | C |
| ATOM | 2777 | CE1 | HIS | C | 73 | 60.634 | 111.896 | 60.080 | 1.00 | 45.15 | C |
| ATOM | 2778 | NE2 | HIS | C | 73 | 59.604 | 111.341 | 59.465 | 1.00 | 45.15 | C |
| ATOM | 2779 | C | HIS | C | 73 | 61.627 | 114.309 | 54.792 | 1.00 | 42.55 | C |
| ATOM | 2780 | O | HIS | C | 73 | 62.266 | 115.363 | 54.828 | 1.00 | 42.55 | C |
| ATOM | 2781 | N | LEU | C | 74 | 60.905 | 113.941 | 53.745 | 1.00 | 42.14 | C |
| ATOM | 2782 | CA | LEU | C | 74 | 60.812 | 114.783 | 52.569 | 1.00 | 42.14 | C |
| ATOM | 2783 | CB | LEU | C | 74 | 60.150 | 114.005 | 51.433 | 1.00 | 50.46 | C |
| ATOM | 2784 | CG | LEU | C | 74 | 60.181 | 114.628 | 50.038 | 1.00 | 50.46 | C |
| ATOM | 2785 | CD1 | LEU | C | 74 | 61.586 | 114.549 | 49.482 | 1.00 | 50.46 | C |
| ATOM | 2786 | CD2 | LEU | C | 74 | 59.231 | 113.876 | 49.128 | 1.00 | 50.46 | C |
| ATOM | 2787 | C | LEU | C | 74 | 59.986 | 116.028 | 52.897 | 1.00 | 42.14 | C |
| ATOM | 2788 | O | LEU | C | 74 | 58.870 | 115.928 | 53.415 | 1.00 | 42.14 | C |
| ATOM | 2789 | N | GLU | C | 75 | 60.546 | 117.199 | 52.606 | 1.00 | 42.02 | C |
| ATOM | 2790 | CA | GLU | C | 75 | 59.858 | 118.469 | 52.833 | 1.00 | 42.02 | C |
| ATOM | 2791 | CB | GLU | C | 75 | 60.686 | 119.388 | 53.728 | 1.00 | 61.65 | C |
| ATOM | 2792 | CG | GLU | C | 75 | 60.942 | 118.890 | 55.124 | 1.00 | 61.65 | C |
| ATOM | 2793 | CD | GLU | C | 75 | 61.856 | 119.824 | 55.884 | 1.00 | 61.65 | C |
| ATOM | 2794 | OE1 | GLU | C | 75 | 63.080 | 119.799 | 55.629 | 1.00 | 61.65 | C |
| ATOM | 2795 | OE2 | GLU | C | 75 | 61.346 | 120.597 | 56.724 | 1.00 | 61.65 | C |
| ATOM | 2796 | C | GLU | C | 75 | 59.639 | 119.188 | 51.505 | 1.00 | 42.02 | C |
| ATOM | 2797 | O | GLU | C | 75 | 60.546 | 119.260 | 50.680 | 1.00 | 42.02 | C |
| ATOM | 2798 | N | ILE | C | 76 | 58.440 | 119.714 | 51.295 | 1.00 | 41.08 | C |
| ATOM | 2799 | CA | ILE | C | 76 | 58.156 | 120.463 | 50.075 | 1.00 | 41.08 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|---------|--------|------|-------|---|
| ATOM | 2800 | CB | ILE | C | 76 | 56.900 | 119.918 | 49.358 | 1.00 | 31.52 | C |
| ATOM | 2801 | CG2 | ILE | C | 76 | 56.571 | 120.796 | 48.150 | 1.00 | 31.52 | C |
| ATOM | 2802 | CG1 | ILE | C | 76 | 57.136 | 118.454 | 48.954 | 1.00 | 31.52 | C |
| ATOM | 2803 | CD1 | ILE | C | 76 | 55.946 | 117.758 | 48.325 | 1.00 | 31.52 | C |
| ATOM | 2804 | C | ILE | C | 76 | 57.951 | 121.927 | 50.490 | 1.00 | 41.08 | C |
| ATOM | 2805 | O | ILE | C | 76 | 56.954 | 122.282 | 51.122 | 1.00 | 41.08 | C |
| ATOM | 2806 | N | PHE | C | 77 | 58.918 | 122.769 | 50.149 | 1.00 | 46.90 | C |
| ATOM | 2807 | CA | PHE | C | 77 | 58.870 | 124.174 | 50.519 | 1.00 | 46.90 | C |
| ATOM | 2808 | CB | PHE | C | 77 | 60.296 | 124.712 | 50.660 | 1.00 | 43.12 | C |
| ATOM | 2809 | CG | PHE | C | 77 | 60.961 | 124.302 | 51.941 | 1.00 | 43.12 | C |
| ATOM | 2810 | CD1 | PHE | C | 77 | 60.692 | 124.981 | 53.127 | 1.00 | 43.12 | C |
| ATOM | 2811 | CD2 | PHE | C | 77 | 61.797 | 123.199 | 51.985 | 1.00 | 43.12 | C |
| ATOM | 2812 | CE1 | PHE | C | 77 | 61.248 | 124.559 | 54.341 | 1.00 | 43.12 | C |
| ATOM | 2813 | CE2 | PHE | C | 77 | 62.354 | 122.773 | 53.193 | 1.00 | 43.12 | C |
| ATOM | 2814 | CZ | PHE | C | 77 | 62.076 | 123.454 | 54.371 | 1.00 | 43.12 | C |
| ATOM | 2815 | C | PHE | C | 77 | 58.053 | 125.066 | 49.602 | 1.00 | 46.90 | C |
| ATOM | 2816 | O | PHE | C | 77 | 57.856 | 124.763 | 48.423 | 1.00 | 46.90 | C |
| ATOM | 2817 | N | PRO | C | 78 | 57.551 | 126.184 | 50.150 | 1.00 | 46.05 | C |
| ATOM | 2818 | CD | PRO | C | 78 | 57.618 | 126.564 | 51.574 | 1.00 | 34.87 | C |
| ATOM | 2819 | CA | PRO | C | 78 | 56.742 | 127.144 | 49.397 | 1.00 | 46.05 | C |
| ATOM | 2820 | CB | PRO | C | 78 | 56.491 | 128.251 | 50.415 | 1.00 | 34.87 | C |
| ATOM | 2821 | CG | PRO | C | 78 | 56.432 | 127.497 | 51.704 | 1.00 | 34.87 | C |
| ATOM | 2822 | C | PRO | C | 78 | 57.433 | 127.645 | 48.135 | 1.00 | 46.05 | C |
| ATOM | 2823 | O | PRO | C | 78 | 56.777 | 127.845 | 47.118 | 1.00 | 46.05 | C |
| ATOM | 2824 | N | ASN | C | 79 | 58.749 | 127.845 | 48.182 | 1.00 | 45.01 | C |
| ATOM | 2825 | CA | ASN | C | 79 | 59.449 | 128.313 | 46.991 | 1.00 | 45.01 | C |
| ATOM | 2826 | CB | ASN | C | 79 | 60.763 | 129.015 | 47.340 | 1.00 | 49.74 | C |
| ATOM | 2827 | CG | ASN | C | 79 | 61.668 | 128.189 | 48.225 | 1.00 | 49.74 | C |
| ATOM | 2828 | OD1 | ASN | C | 79 | 61.667 | 126.951 | 48.180 | 1.00 | 49.74 | C |
| ATOM | 2829 | ND2 | ASN | C | 79 | 62.467 | 128.906 | 49.015 | 1.00 | 49.74 | C |
| ATOM | 2830 | C | ASN | C | 79 | 59.723 | 127.199 | 45.989 | 1.00 | 45.01 | C |
| ATOM | 2831 | O | ASN | C | 79 | 60.527 | 127.363 | 45.071 | 1.00 | 45.01 | C |
| ATOM | 2832 | N | GLY | C | 80 | 59.055 | 126.064 | 46.167 | 1.00 | 47.67 | C |
| ATOM | 2833 | CA | GLY | C | 80 | 59.224 | 124.955 | 45.246 | 1.00 | 47.67 | C |
| ATOM | 2834 | C | GLY | C | 80 | 60.463 | 124.112 | 45.466 | 1.00 | 47.67 | C |
| ATOM | 2835 | O | GLY | C | 80 | 60.762 | 123.217 | 44.684 | 1.00 | 47.67 | C |
| ATOM | 2836 | N | THR | C | 81 | 61.189 | 124.396 | 46.532 | 1.00 | 40.35 | C |
| ATOM | 2837 | CA | THR | C | 81 | 62.389 | 123.644 | 46.838 | 1.00 | 40.35 | C |
| ATOM | 2838 | CB | THR | C | 81 | 63.383 | 124.535 | 47.605 | 1.00 | 62.47 | C |
| ATOM | 2839 | OG1 | THR | C | 81 | 64.064 | 125.376 | 46.667 | 1.00 | 62.47 | C |
| ATOM | 2840 | CG2 | THR | C | 81 | 64.398 | 123.706 | 48.367 | 1.00 | 62.47 | C |
| ATOM | 2841 | C | THR | C | 81 | 62.071 | 122.374 | 47.628 | 1.00 | 40.35 | C |
| ATOM | 2842 | O | THR | C | 81 | 61.089 | 122.310 | 48.368 | 1.00 | 40.35 | C |
| ATOM | 2843 | N | ILE | C | 82 | 62.894 | 121.352 | 47.429 | 1.00 | 48.55 | C |
| ATOM | 2844 | CA | ILE | C | 82 | 62.716 | 120.087 | 48.110 | 1.00 | 48.55 | C |
| ATOM | 2845 | CB | ILE | C | 82 | 62.677 | 118.909 | 47.114 | 1.00 | 35.35 | C |
| ATOM | 2846 | CG2 | ILE | C | 82 | 62.562 | 117.573 | 47.876 | 1.00 | 35.35 | C |
| ATOM | 2847 | CG1 | ILE | C | 82 | 61.498 | 119.098 | 46.164 | 1.00 | 35.35 | C |
| ATOM | 2848 | CD1 | ILE | C | 82 | 60.195 | 119.305 | 46.886 | 1.00 | 35.35 | C |
| ATOM | 2849 | C | ILE | C | 82 | 63.880 | 119.929 | 49.055 | 1.00 | 48.55 | C |
| ATOM | 2850 | O | ILE | C | 82 | 65.009 | 120.269 | 48.714 | 1.00 | 48.55 | C |
| ATOM | 2851 | N | GLN | C | 83 | 63.606 | 119.393 | 50.237 | 1.00 | 39.36 | C |
| ATOM | 2852 | CA | GLN | C | 83 | 64.637 | 119.251 | 51.250 | 1.00 | 39.36 | C |
| ATOM | 2853 | CB | GLN | C | 83 | 64.698 | 120.564 | 52.035 | 1.00 | 65.22 | C |
| ATOM | 2854 | CG | GLN | C | 83 | 65.819 | 120.712 | 53.033 | 1.00 | 65.22 | C |
| ATOM | 2855 | CD | GLN | C | 83 | 65.788 | 122.080 | 53.696 | 1.00 | 65.22 | C |
| ATOM | 2856 | OE1 | GLN | C | 83 | 65.959 | 123.108 | 53.033 | 1.00 | 65.22 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|---------|--------|------|-------|---|
| ATOM | 2857 | NE2 | GLN | C | 83 | 65.552 | 122.099 | 55.007 | 1.00 | 65.22 | C |
| ATOM | 2858 | C | GLN | C | 83 | 64.326 | 118.083 | 52.180 | 1.00 | 39.36 | C |
| ATOM | 2859 | O | GLN | C | 83 | 63.247 | 117.505 | 52.122 | 1.00 | 39.36 | C |
| ATOM | 2860 | N | GLY | C | 84 | 65.287 | 117.741 | 53.029 | 1.00 | 46.73 | C |
| ATOM | 2861 | CA | GLY | C | 84 | 65.100 | 116.651 | 53.966 | 1.00 | 46.73 | C |
| ATOM | 2862 | C | GLY | C | 84 | 65.369 | 117.127 | 55.378 | 1.00 | 46.73 | C |
| ATOM | 2863 | O | GLY | C | 84 | 66.242 | 117.965 | 55.602 | 1.00 | 46.73 | C |
| ATOM | 2864 | N | THR | C | 85 | 64.615 | 116.603 | 56.335 | 1.00 | 48.67 | C |
| ATOM | 2865 | CA | THR | C | 85 | 64.795 | 116.993 | 57.723 | 1.00 | 48.67 | C |
| ATOM | 2866 | CB | THR | C | 85 | 63.795 | 118.083 | 58.129 | 1.00 | 59.68 | C |
| ATOM | 2867 | OG1 | THR | C | 85 | 64.077 | 118.506 | 59.467 | 1.00 | 59.68 | C |
| ATOM | 2868 | CG2 | THR | C | 85 | 62.369 | 117.548 | 58.063 | 1.00 | 59.68 | C |
| ATOM | 2869 | C | THR | C | 85 | 64.616 | 115.813 | 58.668 | 1.00 | 48.67 | C |
| ATOM | 2870 | O | THR | C | 85 | 63.725 | 114.979 | 58.479 | 1.00 | 48.67 | C |
| ATOM | 2871 | N | ARG | C | 86 | 65.467 | 115.747 | 59.687 | 1.00 | 47.24 | C |
| ATOM | 2872 | CA | ARG | C | 86 | 65.384 | 114.675 | 60.672 | 1.00 | 47.24 | C |
| ATOM | 2873 | CB | ARG | C | 86 | 66.672 | 114.609 | 61.488 | 1.00 | 80.07 | C |
| ATOM | 2874 | CG | ARG | C | 86 | 67.859 | 114.170 | 60.676 | 1.00 | 80.07 | C |
| ATOM | 2875 | CD | ARG | C | 86 | 69.132 | 114.159 | 61.493 | 1.00 | 80.07 | C |
| ATOM | 2876 | NE | ARG | C | 86 | 70.212 | 113.498 | 60.766 | 1.00 | 80.07 | C |
| ATOM | 2877 | CZ | ARG | C | 86 | 70.171 | 112.230 | 60.362 | 1.00 | 80.07 | C |
| ATOM | 2878 | NH1 | ARG | C | 86 | 69.101 | 111.484 | 60.616 | 1.00 | 80.07 | C |
| ATOM | 2879 | NH2 | ARG | C | 86 | 71.196 | 111.708 | 59.698 | 1.00 | 80.07 | C |
| ATOM | 2880 | C | ARG | C | 86 | 64.193 | 114.917 | 61.593 | 1.00 | 47.24 | C |
| ATOM | 2881 | O | ARG | C | 86 | 63.651 | 113.980 | 62.178 | 1.00 | 47.24 | C |
| ATOM | 2882 | N | LYS | C | 87 | 63.787 | 116.180 | 61.699 | 1.00 | 58.17 | C |
| ATOM | 2883 | CA | LYS | C | 87 | 62.668 | 116.577 | 62.542 | 1.00 | 58.17 | C |
| ATOM | 2884 | CB | LYS | C | 87 | 62.381 | 118.067 | 62.374 | 1.00 | 93.57 | C |
| ATOM | 2885 | CG | LYS | C | 87 | 63.603 | 118.960 | 62.453 | 1.00 | 93.57 | C |
| ATOM | 2886 | CD | LYS | C | 87 | 64.198 | 118.998 | 63.849 | 1.00 | 93.57 | C |
| ATOM | 2887 | CE | LYS | C | 87 | 65.421 | 119.911 | 63.891 | 1.00 | 93.57 | C |
| ATOM | 2888 | NZ | LYS | C | 87 | 65.104 | 121.301 | 63.450 | 1.00 | 93.57 | C |
| ATOM | 2889 | C | LYS | C | 87 | 61.411 | 115.797 | 62.192 | 1.00 | 58.17 | C |
| ATOM | 2890 | O | LYS | C | 87 | 61.208 | 115.409 | 61.041 | 1.00 | 58.17 | C |
| ATOM | 2891 | N | ASP | C | 88 | 60.571 | 115.572 | 63.197 | 1.00 | 49.56 | C |
| ATOM | 2892 | CA | ASP | C | 88 | 59.313 | 114.858 | 63.020 | 1.00 | 49.56 | C |
| ATOM | 2893 | CB | ASP | C | 88 | 59.094 | 113.882 | 64.175 | 1.00 | 53.79 | C |
| ATOM | 2894 | CG | ASP | C | 88 | 57.745 | 113.195 | 64.113 | 1.00 | 53.79 | C |
| ATOM | 2895 | OD1 | ASP | C | 88 | 57.372 | 112.687 | 63.036 | 1.00 | 53.79 | C |
| ATOM | 2896 | OD2 | ASP | C | 88 | 57.052 | 113.151 | 65.147 | 1.00 | 53.79 | C |
| ATOM | 2897 | C | ASP | C | 88 | 58.204 | 115.900 | 62.990 | 1.00 | 49.56 | C |
| ATOM | 2898 | O | ASP | C | 88 | 58.297 | 116.927 | 63.657 | 1.00 | 49.56 | C |
| ATOM | 2899 | N | HIS | C | 89 | 57.167 | 115.643 | 62.202 | 1.00 | 58.06 | C |
| ATOM | 2900 | CA | HIS | C | 89 | 56.043 | 116.567 | 62.082 | 1.00 | 58.06 | C |
| ATOM | 2901 | CB | HIS | C | 89 | 55.211 | 116.572 | 63.355 | 1.00 | 49.88 | C |
| ATOM | 2902 | CG | HIS | C | 89 | 54.337 | 115.375 | 63.484 | 1.00 | 49.88 | C |
| ATOM | 2903 | CD2 | HIS | C | 89 | 53.215 | 115.019 | 62.815 | 1.00 | 49.88 | C |
| ATOM | 2904 | ND1 | HIS | C | 89 | 54.626 | 114.335 | 64.338 | 1.00 | 49.88 | C |
| ATOM | 2905 | CE1 | HIS | C | 89 | 53.718 | 113.387 | 64.187 | 1.00 | 49.88 | C |
| ATOM | 2906 | NE2 | HIS | C | 89 | 52.850 | 113.777 | 63.269 | 1.00 | 49.88 | C |
| ATOM | 2907 | C | HIS | C | 89 | 56.451 | 117.985 | 61.757 | 1.00 | 58.06 | C |
| ATOM | 2908 | O | HIS | C | 89 | 55.820 | 118.946 | 62.199 | 1.00 | 58.06 | C |
| ATOM | 2909 | N | SER | C | 90 | 57.512 | 118.113 | 60.982 | 1.00 | 46.04 | C |
| ATOM | 2910 | CA | SER | C | 90 | 57.977 | 119.424 | 60.590 | 1.00 | 46.04 | C |
| ATOM | 2911 | CB | SER | C | 90 | 59.296 | 119.324 | 59.823 | 1.00 | 57.14 | C |
| ATOM | 2912 | OG | SER | C | 90 | 59.098 | 118.708 | 58.560 | 1.00 | 57.14 | C |
| ATOM | 2913 | C | SER | C | 90 | 56.930 | 120.014 | 59.669 | 1.00 | 46.04 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|---------|--------|------|-------|---|
| ATOM | 2914 | O | SER | C | 90 | 56.219 | 119.291 | 58.965 | 1.00 | 46.04 | C |
| ATOM | 2915 | N | ARG | C | 91 | 56.815 | 121.330 | 59.693 | 1.00 | 90.55 | C |
| ATOM | 2916 | CA | ARG | C | 91 | 55.893 | 121.995 | 58.803 | 1.00 | 90.55 | C |
| ATOM | 2917 | CB | ARG | C | 91 | 55.849 | 123.480 | 59.149 | 1.00 | 75.27 | C |
| ATOM | 2918 | CG | ARG | C | 91 | 54.928 | 124.318 | 58.306 | 1.00 | 75.27 | C |
| ATOM | 2919 | CD | ARG | C | 91 | 55.165 | 125.773 | 58.608 | 1.00 | 75.27 | C |
| ATOM | 2920 | NE | ARG | C | 91 | 54.482 | 126.638 | 57.658 | 1.00 | 75.27 | C |
| ATOM | 2921 | CZ | ARG | C | 91 | 54.871 | 127.877 | 57.372 | 1.00 | 75.27 | C |
| ATOM | 2922 | NH1 | ARG | C | 91 | 55.942 | 128.391 | 57.967 | 1.00 | 75.27 | C |
| ATOM | 2923 | NH2 | ARG | C | 91 | 54.196 | 128.598 | 56.486 | 1.00 | 75.27 | C |
| ATOM | 2924 | C | ARG | C | 91 | 56.620 | 121.757 | 57.482 | 1.00 | 90.55 | C |
| ATOM | 2925 | O | ARG | C | 91 | 57.855 | 121.804 | 57.444 | 1.00 | 90.55 | C |
| ATOM | 2926 | N | PHE | C | 92 | 55.877 | 121.467 | 56.419 | 1.00 | 56.17 | C |
| ATOM | 2927 | CA | PHE | C | 92 | 56.477 | 121.213 | 55.099 | 1.00 | 56.17 | C |
| ATOM | 2928 | CB | PHE | C | 92 | 57.716 | 122.087 | 54.868 | 1.00 | 56.97 | C |
| ATOM | 2929 | CG | PHE | C | 92 | 57.455 | 123.553 | 55.000 | 1.00 | 56.97 | C |
| ATOM | 2930 | CD1 | PHE | C | 92 | 56.395 | 124.149 | 54.323 | 1.00 | 56.97 | C |
| ATOM | 2931 | CD2 | PHE | C | 92 | 58.267 | 124.344 | 55.808 | 1.00 | 56.97 | C |
| ATOM | 2932 | CE1 | PHE | C | 92 | 56.145 | 125.515 | 54.452 | 1.00 | 56.97 | C |
| ATOM | 2933 | CE2 | PHE | C | 92 | 58.029 | 125.709 | 55.945 | 1.00 | 56.97 | C |
| ATOM | 2934 | CZ | PHE | C | 92 | 56.965 | 126.297 | 55.265 | 1.00 | 56.97 | C |
| ATOM | 2935 | C | PHE | C | 92 | 56.854 | 119.745 | 54.893 | 1.00 | 56.17 | C |
| ATOM | 2936 | O | PHE | C | 92 | 57.224 | 119.335 | 53.794 | 1.00 | 56.17 | C |
| ATOM | 2937 | N | GLY | C | 93 | 56.766 | 118.966 | 55.963 | 1.00 | 43.07 | C |
| ATOM | 2938 | CA | GLY | C | 93 | 57.063 | 117.551 | 55.888 | 1.00 | 43.07 | C |
| ATOM | 2939 | C | GLY | C | 93 | 55.739 | 116.812 | 55.967 | 1.00 | 43.07 | C |
| ATOM | 2940 | O | GLY | C | 93 | 55.693 | 115.578 | 55.919 | 1.00 | 43.07 | C |
| ATOM | 2941 | N | ILE | C | 94 | 54.659 | 117.583 | 56.107 | 1.00 | 48.14 | C |
| ATOM | 2942 | CA | ILE | C | 94 | 53.316 | 117.016 | 56.178 | 1.00 | 48.14 | C |
| ATOM | 2943 | CB | ILE | C | 94 | 52.361 | 117.901 | 57.022 | 1.00 | 37.80 | C |
| ATOM | 2944 | CG2 | ILE | C | 94 | 50.990 | 117.247 | 57.123 | 1.00 | 37.80 | C |
| ATOM | 2945 | CG1 | ILE | C | 94 | 52.957 | 118.120 | 58.414 | 1.00 | 37.80 | C |
| ATOM | 2946 | CD1 | ILE | C | 94 | 53.383 | 116.831 | 59.125 | 1.00 | 37.80 | C |
| ATOM | 2947 | C | ILE | C | 94 | 52.834 | 116.951 | 54.737 | 1.00 | 48.14 | C |
| ATOM | 2948 | O | ILE | C | 94 | 52.651 | 117.979 | 54.081 | 1.00 | 48.14 | C |
| ATOM | 2949 | N | LEU | C | 95 | 52.628 | 115.732 | 54.256 | 1.00 | 40.90 | C |
| ATOM | 2950 | CA | LEU | C | 95 | 52.237 | 115.508 | 52.874 | 1.00 | 40.90 | C |
| ATOM | 2951 | CB | LEU | C | 95 | 53.327 | 114.697 | 52.168 | 1.00 | 37.62 | C |
| ATOM | 2952 | CG | LEU | C | 95 | 54.780 | 115.076 | 52.494 | 1.00 | 37.62 | C |
| ATOM | 2953 | CD1 | LEU | C | 95 | 55.710 | 114.037 | 51.905 | 1.00 | 37.62 | C |
| ATOM | 2954 | CD2 | LEU | C | 95 | 55.109 | 116.454 | 51.948 | 1.00 | 37.62 | C |
| ATOM | 2955 | C | LEU | C | 95 | 50.928 | 114.770 | 52.717 | 1.00 | 40.90 | C |
| ATOM | 2956 | O | LEU | C | 95 | 50.541 | 113.960 | 53.562 | 1.00 | 40.90 | C |
| ATOM | 2957 | N | GLU | C | 96 | 50.252 | 115.043 | 51.612 | 1.00 | 37.54 | C |
| ATOM | 2958 | CA | GLU | C | 96 | 49.004 | 114.364 | 51.319 | 1.00 | 37.54 | C |
| ATOM | 2959 | CB | GLU | C | 96 | 47.917 | 115.358 | 50.948 | 1.00 | 62.78 | C |
| ATOM | 2960 | CG | GLU | C | 96 | 46.558 | 114.725 | 50.819 | 1.00 | 62.78 | C |
| ATOM | 2961 | CD | GLU | C | 96 | 45.581 | 115.641 | 50.141 | 1.00 | 62.78 | C |
| ATOM | 2962 | OE1 | GLU | C | 96 | 45.654 | 116.865 | 50.389 | 1.00 | 62.78 | C |
| ATOM | 2963 | OE2 | GLU | C | 96 | 44.738 | 115.141 | 49.366 | 1.00 | 62.78 | C |
| ATOM | 2964 | C | GLU | C | 96 | 49.235 | 113.423 | 50.143 | 1.00 | 37.54 | C |
| ATOM | 2965 | O | GLU | C | 96 | 49.601 | 113.859 | 49.048 | 1.00 | 37.54 | C |
| ATOM | 2966 | N | PHE | C | 97 | 49.039 | 112.132 | 50.376 | 1.00 | 51.61 | C |
| ATOM | 2967 | CA | PHE | C | 97 | 49.200 | 111.158 | 49.315 | 1.00 | 51.61 | C |
| ATOM | 2968 | CB | PHE | C | 97 | 49.544 | 109.785 | 49.887 | 1.00 | 45.25 | C |
| ATOM | 2969 | CG | PHE | C | 97 | 51.010 | 109.574 | 50.078 | 1.00 | 45.25 | C |
| ATOM | 2970 | CD1 | PHE | C | 97 | 51.762 | 110.467 | 50.838 | 1.00 | 45.25 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 2971 | CD2 | PHE | C | 97 | 51.651 | 108.498 | 49.481 | 1.00 | 45.25 | C |
| ATOM | 2972 | CE1 | PHE | C | 97 | 53.135 | 110.290 | 50.998 | 1.00 | 45.25 | C |
| ATOM | 2973 | CE2 | PHE | C | 97 | 53.026 | 108.311 | 49.635 | 1.00 | 45.25 | C |
| ATOM | 2974 | CZ | PHE | C | 97 | 53.769 | 109.208 | 50.393 | 1.00 | 45.25 | C |
| ATOM | 2975 | C | PHE | C | 97 | 47.921 | 111.086 | 48.512 | 1.00 | 51.61 | C |
| ATOM | 2976 | O | PHE | C | 97 | 46.849 | 110.831 | 49.048 | 1.00 | 51.61 | C |
| ATOM | 2977 | N | ILE | C | 98 | 48.036 | 111.338 | 47.220 | 1.00 | 47.54 | C |
| ATOM | 2978 | CA | ILE | C | 98 | 46.890 | 111.292 | 46.339 | 1.00 | 47.54 | C |
| ATOM | 2979 | CB | ILE | C | 98 | 46.865 | 112.521 | 45.432 | 1.00 | 47.84 | C |
| ATOM | 2980 | CG2 | ILE | C | 98 | 45.652 | 112.479 | 44.520 | 1.00 | 47.84 | C |
| ATOM | 2981 | CG1 | ILE | C | 98 | 46.857 | 113.778 | 46.289 | 1.00 | 47.84 | C |
| ATOM | 2982 | CD1 | ILE | C | 98 | 46.992 | 115.031 | 45.488 | 1.00 | 47.84 | C |
| ATOM | 2983 | C | ILE | C | 98 | 47.017 | 110.037 | 45.487 | 1.00 | 47.54 | C |
| ATOM | 2984 | O | ILE | C | 98 | 48.048 | 109.816 | 44.846 | 1.00 | 47.54 | C |
| ATOM | 2985 | N | SER | C | 99 | 45.978 | 109.208 | 45.493 | 1.00 | 68.65 | C |
| ATOM | 2986 | CA | SER | C | 99 | 45.990 | 107.982 | 44.708 | 1.00 | 68.65 | C |
| ATOM | 2987 | CB | SER | C | 99 | 45.126 | 106.916 | 45.375 | 1.00 | 60.37 | C |
| ATOM | 2988 | OG | SER | C | 99 | 45.237 | 105.688 | 44.683 | 1.00 | 60.37 | C |
| ATOM | 2989 | C | SER | C | 99 | 45.484 | 108.266 | 43.296 | 1.00 | 68.65 | C |
| ATOM | 2990 | O | SER | C | 99 | 44.287 | 108.386 | 43.061 | 1.00 | 68.65 | C |
| ATOM | 2991 | N | ILE | C | 100 | 46.421 | 108.379 | 42.364 | 1.00 | 45.89 | C |
| ATOM | 2992 | CA | ILE | C | 100 | 46.128 | 108.660 | 40.967 | 1.00 | 45.89 | C |
| ATOM | 2993 | CB | ILE | C | 100 | 47.425 | 109.062 | 40.227 | 1.00 | 42.18 | C |
| ATOM | 2994 | CG2 | ILE | C | 100 | 47.176 | 109.151 | 38.728 | 1.00 | 42.18 | C |
| ATOM | 2995 | CG1 | ILE | C | 100 | 47.957 | 110.377 | 40.802 | 1.00 | 42.18 | C |
| ATOM | 2996 | CD1 | ILE | C | 100 | 47.029 | 111.561 | 40.628 | 1.00 | 42.18 | C |
| ATOM | 2997 | C | ILE | C | 100 | 45.513 | 107.451 | 40.263 | 1.00 | 45.89 | C |
| ATOM | 2998 | O | ILE | C | 100 | 44.634 | 107.590 | 39.418 | 1.00 | 45.89 | C |
| ATOM | 2999 | N | ALA | C | 101 | 45.992 | 106.266 | 40.615 | 1.00 | 42.48 | C |
| ATOM | 3000 | CA | ALA | C | 101 | 45.506 | 105.037 | 40.020 | 1.00 | 42.48 | C |
| ATOM | 3001 | CB | ALA | C | 101 | 45.751 | 105.045 | 38.513 | 1.00 | 44.15 | C |
| ATOM | 3002 | C | ALA | C | 101 | 46.261 | 103.897 | 40.669 | 1.00 | 42.48 | C |
| ATOM | 3003 | O | ALA | C | 101 | 47.077 | 104.120 | 41.564 | 1.00 | 42.48 | C |
| ATOM | 3004 | N | VAL | C | 102 | 45.993 | 102.678 | 40.220 | 1.00 | 53.84 | C |
| ATOM | 3005 | CA | VAL | C | 102 | 46.660 | 101.508 | 40.775 | 1.00 | 53.84 | C |
| ATOM | 3006 | CB | VAL | C | 102 | 46.148 | 100.205 | 40.112 | 1.00 | 65.50 | C |
| ATOM | 3007 | CG1 | VAL | C | 102 | 46.804 | 98.993 | 40.760 | 1.00 | 65.50 | C |
| ATOM | 3008 | CG2 | VAL | C | 102 | 44.630 | 100.122 | 40.240 | 1.00 | 65.50 | C |
| ATOM | 3009 | C | VAL | C | 102 | 48.164 | 101.610 | 40.570 | 1.00 | 53.84 | C |
| ATOM | 3010 | O | VAL | C | 102 | 48.643 | 101.675 | 39.435 | 1.00 | 53.84 | C |
| ATOM | 3011 | N | GLY | C | 103 | 48.904 | 101.636 | 41.673 | 1.00 | 50.95 | C |
| ATOM | 3012 | CA | GLY | C | 103 | 50.353 | 101.719 | 41.590 | 1.00 | 50.95 | C |
| ATOM | 3013 | C | GLY | C | 103 | 50.918 | 103.112 | 41.369 | 1.00 | 50.95 | C |
| ATOM | 3014 | O | GLY | C | 103 | 52.134 | 103.286 | 41.361 | 1.00 | 50.95 | C |
| ATOM | 3015 | N | LEU | C | 104 | 50.045 | 104.102 | 41.203 | 1.00 | 47.50 | C |
| ATOM | 3016 | CA | LEU | C | 104 | 50.473 | 105.473 | 40.974 | 1.00 | 47.50 | C |
| ATOM | 3017 | CB | LEU | C | 104 | 49.950 | 105.969 | 39.624 | 1.00 | 41.41 | C |
| ATOM | 3018 | CG | LEU | C | 104 | 50.320 | 105.165 | 38.368 | 1.00 | 41.41 | C |
| ATOM | 3019 | CD1 | LEU | C | 104 | 49.739 | 105.861 | 37.133 | 1.00 | 41.41 | C |
| ATOM | 3020 | CD2 | LEU | C | 104 | 51.835 | 105.042 | 38.245 | 1.00 | 41.41 | C |
| ATOM | 3021 | C | LEU | C | 104 | 49.982 | 106.420 | 42.059 | 1.00 | 47.50 | C |
| ATOM | 3022 | O | LEU | C | 104 | 48.862 | 106.283 | 42.545 | 1.00 | 47.50 | C |
| ATOM | 3023 | N | VAL | C | 105 | 50.822 | 107.381 | 42.435 | 1.00 | 36.41 | C |
| ATOM | 3024 | CA | VAL | C | 105 | 50.447 | 108.380 | 43.434 | 1.00 | 36.41 | C |
| ATOM | 3025 | CB | VAL | C | 105 | 51.016 | 108.080 | 44.853 | 1.00 | 35.73 | C |
| ATOM | 3026 | CG1 | VAL | C | 105 | 50.599 | 106.702 | 45.323 | 1.00 | 35.73 | C |
| ATOM | 3027 | CG2 | VAL | C | 105 | 52.536 | 108.228 | 44.839 | 1.00 | 35.73 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3028 | C | VAL | C | 105 | 50.983 | 109.757 | 43.081 | 1.00 | 36.41 | C |
| ATOM | 3029 | O | VAL | C | 105 | 51.826 | 109.919 | 42.197 | 1.00 | 36.41 | C |
| ATOM | 3030 | N | SER | C | 106 | 50.466 | 110.747 | 43.795 | 1.00 | 38.37 | C |
| ATOM | 3031 | CA | SER | C | 106 | 50.913 | 112.117 | 43.675 | 1.00 | 38.37 | C |
| ATOM | 3032 | CB | SER | C | 106 | 49.866 | 112.985 | 42.987 | 1.00 | 46.65 | C |
| ATOM | 3033 | OG | SER | C | 106 | 49.983 | 112.877 | 41.579 | 1.00 | 46.65 | C |
| ATOM | 3034 | C | SER | C | 106 | 51.106 | 112.526 | 45.138 | 1.00 | 38.37 | C |
| ATOM | 3035 | O | SER | C | 106 | 50.397 | 112.036 | 46.024 | 1.00 | 38.37 | C |
| ATOM | 3036 | N | ILE | C | 107 | 52.086 | 113.386 | 45.402 | 1.00 | 38.47 | C |
| ATOM | 3037 | CA | ILE | C | 107 | 52.354 | 113.808 | 46.769 | 1.00 | 38.47 | C |
| ATOM | 3038 | CB | ILE | C | 107 | 53.748 | 113.341 | 47.203 | 1.00 | 37.99 | C |
| ATOM | 3039 | CG2 | ILE | C | 107 | 53.990 | 113.695 | 48.658 | 1.00 | 37.99 | C |
| ATOM | 3040 | CG1 | ILE | C | 107 | 53.854 | 111.827 | 46.994 | 1.00 | 37.99 | C |
| ATOM | 3041 | CD1 | ILE | C | 107 | 55.262 | 111.262 | 47.188 | 1.00 | 37.99 | C |
| ATOM | 3042 | C | ILE | C | 107 | 52.245 | 115.316 | 46.907 | 1.00 | 38.47 | C |
| ATOM | 3043 | O | ILE | C | 107 | 52.987 | 116.061 | 46.271 | 1.00 | 38.47 | C |
| ATOM | 3044 | N | ARG | C | 108 | 51.312 | 115.764 | 47.741 | 1.00 | 39.32 | C |
| ATOM | 3045 | CA | ARG | C | 108 | 51.113 | 117.195 | 47.932 | 1.00 | 39.32 | C |
| ATOM | 3046 | CB | ARG | C | 108 | 49.660 | 117.570 | 47.641 | 1.00 | 71.06 | C |
| ATOM | 3047 | CG | ARG | C | 108 | 49.439 | 119.069 | 47.577 | 1.00 | 71.06 | C |
| ATOM | 3048 | CD | ARG | C | 108 | 48.032 | 119.422 | 47.139 | 1.00 | 71.06 | C |
| ATOM | 3049 | NE | ARG | C | 108 | 47.937 | 120.833 | 46.779 | 1.00 | 71.06 | C |
| ATOM | 3050 | CZ | ARG | C | 108 | 46.838 | 121.415 | 46.310 | 1.00 | 71.06 | C |
| ATOM | 3051 | NH1 | ARG | C | 108 | 45.728 | 120.706 | 46.145 | 1.00 | 71.06 | C |
| ATOM | 3052 | NH2 | ARG | C | 108 | 46.850 | 122.705 | 45.999 | 1.00 | 71.06 | C |
| ATOM | 3053 | C | ARG | C | 108 | 51.497 | 117.713 | 49.316 | 1.00 | 39.32 | C |
| ATOM | 3054 | O | ARG | C | 108 | 50.983 | 117.242 | 50.331 | 1.00 | 39.32 | C |
| ATOM | 3055 | N | GLY | C | 109 | 52.418 | 118.672 | 49.351 | 1.00 | 47.30 | C |
| ATOM | 3056 | CA | GLY | C | 109 | 52.810 | 119.254 | 50.621 | 1.00 | 47.30 | C |
| ATOM | 3057 | C | GLY | C | 109 | 51.585 | 120.004 | 51.112 | 1.00 | 47.30 | C |
| ATOM | 3058 | O | GLY | C | 109 | 51.084 | 120.891 | 50.423 | 1.00 | 47.30 | C |
| ATOM | 3059 | N | VAL | C | 110 | 51.079 | 119.640 | 52.284 | 1.00 | 51.39 | C |
| ATOM | 3060 | CA | VAL | C | 110 | 49.883 | 120.285 | 52.816 | 1.00 | 51.39 | C |
| ATOM | 3061 | CB | VAL | C | 110 | 49.451 | 119.641 | 54.149 | 1.00 | 45.60 | C |
| ATOM | 3062 | CG1 | VAL | C | 110 | 48.334 | 120.457 | 54.784 | 1.00 | 45.60 | C |
| ATOM | 3063 | CG2 | VAL | C | 110 | 48.984 | 118.212 | 53.898 | 1.00 | 45.60 | C |
| ATOM | 3064 | C | VAL | C | 110 | 50.049 | 121.785 | 53.024 | 1.00 | 51.39 | C |
| ATOM | 3065 | O | VAL | C | 110 | 49.206 | 122.576 | 52.602 | 1.00 | 51.39 | C |
| ATOM | 3066 | N | ASP | C | 111 | 51.142 | 122.168 | 53.672 | 1.00 | 51.41 | C |
| ATOM | 3067 | CA | ASP | C | 111 | 51.408 | 123.567 | 53.942 | 1.00 | 51.41 | C |
| ATOM | 3068 | CB | ASP | C | 111 | 52.613 | 123.690 | 54.871 | 1.00 | 79.49 | C |
| ATOM | 3069 | CG | ASP | C | 111 | 52.703 | 125.046 | 55.524 | 1.00 | 79.49 | C |
| ATOM | 3070 | OD1 | ASP | C | 111 | 52.976 | 126.029 | 54.805 | 1.00 | 79.49 | C |
| ATOM | 3071 | OD2 | ASP | C | 111 | 52.492 | 125.128 | 56.754 | 1.00 | 79.49 | C |
| ATOM | 3072 | C | ASP | C | 111 | 51.642 | 124.360 | 52.656 | 1.00 | 51.41 | C |
| ATOM | 3073 | O | ASP | C | 111 | 50.904 | 125.297 | 52.365 | 1.00 | 51.41 | C |
| ATOM | 3074 | N | SER | C | 112 | 52.655 | 123.980 | 51.883 | 1.00 | 45.97 | C |
| ATOM | 3075 | CA | SER | C | 112 | 52.968 | 124.680 | 50.638 | 1.00 | 45.97 | C |
| ATOM | 3076 | CB | SER | C | 112 | 54.268 | 124.149 | 50.036 | 1.00 | 47.62 | C |
| ATOM | 3077 | OG | SER | C | 112 | 54.058 | 122.896 | 49.403 | 1.00 | 47.62 | C |
| ATOM | 3078 | C | SER | C | 112 | 51.869 | 124.544 | 49.591 | 1.00 | 45.97 | C |
| ATOM | 3079 | O | SER | C | 112 | 51.645 | 125.451 | 48.792 | 1.00 | 45.97 | C |
| ATOM | 3080 | N | GLY | C | 113 | 51.189 | 123.404 | 49.592 | 1.00 | 48.43 | C |
| ATOM | 3081 | CA | GLY | C | 113 | 50.148 | 123.177 | 48.614 | 1.00 | 48.43 | C |
| ATOM | 3082 | C | GLY | C | 113 | 50.771 | 122.794 | 47.284 | 1.00 | 48.43 | C |
| ATOM | 3083 | O | GLY | C | 113 | 50.075 | 122.690 | 46.271 | 1.00 | 48.43 | C |
| ATOM | 3084 | N | LEU | C | 114 | 52.083 | 122.575 | 47.280 | 1.00 | 50.49 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3085 | CA | LEU | C | 114 | 52.775 | 122.218 | 46.049 | 1.00 | 50.49 | C |
| ATOM | 3086 | CB | LEU | C | 114 | 54.153 | 122.889 | 46.001 | 1.00 | 42.01 | C |
| ATOM | 3087 | CG | LEU | C | 114 | 54.179 | 124.422 | 46.069 | 1.00 | 42.01 | C |
| ATOM | 3088 | CD1 | LEU | C | 114 | 55.622 | 124.900 | 46.140 | 1.00 | 42.01 | C |
| ATOM | 3089 | CD2 | LEU | C | 114 | 53.473 | 125.016 | 44.857 | 1.00 | 42.01 | C |
| ATOM | 3090 | C | LEU | C | 114 | 52.925 | 120.709 | 45.877 | 1.00 | 50.49 | C |
| ATOM | 3091 | O | LEU | C | 114 | 53.099 | 119.966 | 46.848 | 1.00 | 50.49 | C |
| ATOM | 3092 | N | TYR | C | 115 | 52.852 | 120.265 | 44.627 | 1.00 | 38.22 | C |
| ATOM | 3093 | CA | TYR | C | 115 | 52.979 | 118.849 | 44.305 | 1.00 | 38.22 | C |
| ATOM | 3094 | CB | TYR | C | 115 | 52.156 | 118.512 | 43.060 | 1.00 | 51.09 | C |
| ATOM | 3095 | CG | TYR | C | 115 | 50.673 | 118.714 | 43.231 | 1.00 | 51.09 | C |
| ATOM | 3096 | CD1 | TYR | C | 115 | 49.875 | 117.735 | 43.819 | 1.00 | 51.09 | C |
| ATOM | 3097 | CE1 | TYR | C | 115 | 48.500 | 117.921 | 43.968 | 1.00 | 51.09 | C |
| ATOM | 3098 | CD2 | TYR | C | 115 | 50.062 | 119.890 | 42.798 | 1.00 | 51.09 | C |
| ATOM | 3099 | CE2 | TYR | C | 115 | 48.700 | 120.089 | 42.941 | 1.00 | 51.09 | C |
| ATOM | 3100 | CZ | TYR | C | 115 | 47.922 | 119.105 | 43.523 | 1.00 | 51.09 | C |
| ATOM | 3101 | OH | TYR | C | 115 | 46.567 | 119.312 | 43.643 | 1.00 | 51.09 | C |
| ATOM | 3102 | C | TYR | C | 115 | 54.427 | 118.468 | 44.051 | 1.00 | 38.22 | C |
| ATOM | 3103 | O | TYR | C | 115 | 55.189 | 119.237 | 43.481 | 1.00 | 38.22 | C |
| ATOM | 3104 | N | LEU | C | 116 | 54.804 | 117.276 | 44.488 | 1.00 | 35.89 | C |
| ATOM | 3105 | CA | LEU | C | 116 | 56.148 | 116.796 | 44.265 | 1.00 | 35.89 | C |
| ATOM | 3106 | CB | LEU | C | 116 | 56.409 | 115.528 | 45.067 | 1.00 | 39.96 | C |
| ATOM | 3107 | CG | LEU | C | 116 | 57.839 | 115.007 | 44.919 | 1.00 | 39.96 | C |
| ATOM | 3108 | CD1 | LEU | C | 116 | 58.791 | 116.004 | 45.549 | 1.00 | 39.96 | C |
| ATOM | 3109 | CD2 | LEU | C | 116 | 57.976 | 113.645 | 45.586 | 1.00 | 39.96 | C |
| ATOM | 3110 | C | LEU | C | 116 | 56.230 | 116.473 | 42.781 | 1.00 | 35.89 | C |
| ATOM | 3111 | O | LEU | C | 116 | 55.378 | 115.748 | 42.235 | 1.00 | 35.89 | C |
| ATOM | 3112 | N | GLY | C | 117 | 57.244 | 117.016 | 42.121 | 1.00 | 33.68 | C |
| ATOM | 3113 | CA | GLY | C | 117 | 57.397 | 116.748 | 40.710 | 1.00 | 33.68 | C |
| ATOM | 3114 | C | GLY | C | 117 | 58.821 | 116.374 | 40.387 | 1.00 | 33.68 | C |
| ATOM | 3115 | O | GLY | C | 117 | 59.726 | 116.635 | 41.181 | 1.00 | 33.68 | C |
| ATOM | 3116 | N | MET | C | 118 | 59.025 | 115.727 | 39.245 | 1.00 | 38.46 | C |
| ATOM | 3117 | CA | MET | C | 118 | 60.375 | 115.386 | 38.823 | 1.00 | 38.46 | C |
| ATOM | 3118 | CB | MET | C | 118 | 60.690 | 113.908 | 39.021 | 1.00 | 34.68 | C |
| ATOM | 3119 | CG | MET | C | 118 | 62.165 | 113.655 | 38.798 | 1.00 | 34.68 | C |
| ATOM | 3120 | SD | MET | C | 118 | 62.632 | 111.942 | 38.667 | 1.00 | 34.68 | C |
| ATOM | 3121 | CE | MET | C | 118 | 62.965 | 111.531 | 40.409 | 1.00 | 34.68 | C |
| ATOM | 3122 | C | MET | C | 118 | 60.529 | 115.749 | 37.352 | 1.00 | 38.46 | C |
| ATOM | 3123 | O | MET | C | 118 | 59.799 | 115.242 | 36.497 | 1.00 | 38.46 | C |
| ATOM | 3124 | N | ASN | C | 119 | 61.478 | 116.633 | 37.059 | 1.00 | 41.83 | C |
| ATOM | 3125 | CA | ASN | C | 119 | 61.679 | 117.065 | 35.686 | 1.00 | 41.83 | C |
| ATOM | 3126 | CB | ASN | C | 119 | 62.261 | 118.485 | 35.649 | 1.00 | 35.45 | C |
| ATOM | 3127 | CG | ASN | C | 119 | 63.685 | 118.564 | 36.194 | 1.00 | 35.45 | C |
| ATOM | 3128 | OD1 | ASN | C | 119 | 64.397 | 117.551 | 36.293 | 1.00 | 35.45 | C |
| ATOM | 3129 | ND2 | ASN | C | 119 | 64.116 | 119.784 | 36.532 | 1.00 | 35.45 | C |
| ATOM | 3130 | C | ASN | C | 119 | 62.535 | 116.122 | 34.843 | 1.00 | 41.83 | C |
| ATOM | 3131 | O | ASN | C | 119 | 63.059 | 115.120 | 35.342 | 1.00 | 41.83 | C |
| ATOM | 3132 | N | GLU | C | 120 | 62.637 | 116.458 | 33.556 | 1.00 | 46.89 | C |
| ATOM | 3133 | CA | GLU | C | 120 | 63.394 | 115.708 | 32.559 | 1.00 | 46.89 | C |
| ATOM | 3134 | CB | GLU | C | 120 | 63.540 | 116.575 | 31.302 | 1.00 | 87.11 | C |
| ATOM | 3135 | CG | GLU | C | 120 | 64.328 | 115.965 | 30.148 | 1.00 | 87.11 | C |
| ATOM | 3136 | CD | GLU | C | 120 | 63.459 | 115.182 | 29.174 | 1.00 | 87.11 | C |
| ATOM | 3137 | OE1 | GLU | C | 120 | 62.364 | 115.673 | 28.826 | 1.00 | 87.11 | C |
| ATOM | 3138 | OE2 | GLU | C | 120 | 63.880 | 114.085 | 28.740 | 1.00 | 87.11 | C |
| ATOM | 3139 | C | GLU | C | 120 | 64.775 | 115.285 | 33.071 | 1.00 | 46.89 | C |
| ATOM | 3140 | O | GLU | C | 120 | 65.247 | 114.198 | 32.740 | 1.00 | 46.89 | C |
| ATOM | 3141 | N | LYS | C | 121 | 65.410 | 116.135 | 33.882 | 1.00 | 45.70 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3142 | CA | LYS | C | 121 | 66.743 | 115.855 | 34.423 | 1.00 | 45.70 | C |
| ATOM | 3143 | CB | LYS | C | 121 | 67.534 | 117.150 | 34.609 | 1.00 | 56.55 | C |
| ATOM | 3144 | CG | LYS | C | 121 | 67.560 | 118.084 | 33.415 | 1.00 | 56.55 | C |
| ATOM | 3145 | CD | LYS | C | 121 | 68.486 | 119.260 | 33.705 | 1.00 | 56.55 | C |
| ATOM | 3146 | CE | LYS | C | 121 | 68.118 | 120.503 | 32.904 | 1.00 | 56.55 | C |
| ATOM | 3147 | NZ | LYS | C | 121 | 66.794 | 121.077 | 33.307 | 1.00 | 56.55 | C |
| ATOM | 3148 | C | LYS | C | 121 | 66.733 | 115.112 | 35.755 | 1.00 | 45.70 | C |
| ATOM | 3149 | O | LYS | C | 121 | 67.775 | 114.977 | 36.406 | 1.00 | 45.70 | C |
| ATOM | 3150 | N | GLY | C | 122 | 65.561 | 114.642 | 36.171 | 1.00 | 45.28 | C |
| ATOM | 3151 | CA | GLY | C | 122 | 65.471 | 113.916 | 37.426 | 1.00 | 45.28 | C |
| ATOM | 3152 | C | GLY | C | 122 | 65.529 | 114.813 | 38.649 | 1.00 | 45.28 | C |
| ATOM | 3153 | O | GLY | C | 122 | 65.806 | 114.350 | 39.758 | 1.00 | 45.28 | C |
| ATOM | 3154 | N | GLU | C | 123 | 65.265 | 116.099 | 38.452 | 1.00 | 35.23 | C |
| ATOM | 3155 | CA | GLU | C | 123 | 65.294 | 117.040 | 39.567 | 1.00 | 35.23 | C |
| ATOM | 3156 | CB | GLU | C | 123 | 65.680 | 118.438 | 39.075 | 1.00 | 55.65 | C |
| ATOM | 3157 | CG | GLU | C | 123 | 67.082 | 118.563 | 38.523 | 1.00 | 55.65 | C |
| ATOM | 3158 | CD | GLU | C | 123 | 67.393 | 119.981 | 38.092 | 1.00 | 55.65 | C |
| ATOM | 3159 | OE1 | GLU | C | 123 | 66.711 | 120.469 | 37.163 | 1.00 | 55.65 | C |
| ATOM | 3160 | OE2 | GLU | C | 123 | 68.306 | 120.607 | 38.685 | 1.00 | 55.65 | C |
| ATOM | 3161 | C | GLU | C | 123 | 63.938 | 117.124 | 40.271 | 1.00 | 35.23 | C |
| ATOM | 3162 | O | GLU | C | 123 | 62.903 | 117.316 | 39.613 | 1.00 | 35.23 | C |
| ATOM | 3163 | N | LEU | C | 124 | 63.947 | 116.989 | 41.598 | 1.00 | 37.52 | C |
| ATOM | 3164 | CA | LEU | C | 124 | 62.709 | 117.089 | 42.371 | 1.00 | 37.52 | C |
| ATOM | 3165 | CB | LEU | C | 124 | 62.872 | 116.504 | 43.784 | 1.00 | 27.36 | C |
| ATOM | 3166 | CG | LEU | C | 124 | 63.221 | 115.019 | 43.885 | 1.00 | 27.36 | C |
| ATOM | 3167 | CD1 | LEU | C | 124 | 63.456 | 114.655 | 45.335 | 1.00 | 27.36 | C |
| ATOM | 3168 | CD2 | LEU | C | 124 | 62.098 | 114.183 | 43.263 | 1.00 | 27.36 | C |
| ATOM | 3169 | C | LEU | C | 124 | 62.352 | 118.561 | 42.503 | 1.00 | 37.52 | C |
| ATOM | 3170 | O | LEU | C | 124 | 63.231 | 119.417 | 42.516 | 1.00 | 37.52 | C |
| ATOM | 3171 | N | TYR | C | 125 | 61.063 | 118.851 | 42.598 | 1.00 | 43.13 | C |
| ATOM | 3172 | CA | TYR | C | 125 | 60.620 | 120.221 | 42.764 | 1.00 | 43.13 | C |
| ATOM | 3173 | CB | TYR | C | 125 | 60.807 | 121.017 | 41.466 | 1.00 | 39.47 | C |
| ATOM | 3174 | CG | TYR | C | 125 | 59.862 | 120.627 | 40.354 | 1.00 | 39.47 | C |
| ATOM | 3175 | CD1 | TYR | C | 125 | 60.105 | 119.499 | 39.564 | 1.00 | 39.47 | C |
| ATOM | 3176 | CE1 | TYR | C | 125 | 59.213 | 119.117 | 38.564 | 1.00 | 39.47 | C |
| ATOM | 3177 | CD2 | TYR | C | 125 | 58.705 | 121.363 | 40.117 | 1.00 | 39.47 | C |
| ATOM | 3178 | CE2 | TYR | C | 125 | 57.806 | 120.993 | 39.130 | 1.00 | 39.47 | C |
| ATOM | 3179 | CZ | TYR | C | 125 | 58.062 | 119.869 | 38.354 | 1.00 | 39.47 | C |
| ATOM | 3180 | OH | TYR | C | 125 | 57.153 | 119.498 | 37.380 | 1.00 | 39.47 | C |
| ATOM | 3181 | C | TYR | C | 125 | 59.154 | 120.237 | 43.177 | 1.00 | 43.13 | C |
| ATOM | 3182 | O | TYR | C | 125 | 58.437 | 119.259 | 42.970 | 1.00 | 43.13 | C |
| ATOM | 3183 | N | GLY | C | 126 | 58.725 | 121.345 | 43.780 | 1.00 | 35.54 | C |
| ATOM | 3184 | CA | GLY | C | 126 | 57.344 | 121.491 | 44.193 | 1.00 | 35.54 | C |
| ATOM | 3185 | C | GLY | C | 126 | 56.623 | 122.131 | 43.032 | 1.00 | 35.54 | C |
| ATOM | 3186 | O | GLY | C | 126 | 57.012 | 123.193 | 42.568 | 1.00 | 35.54 | C |
| ATOM | 3187 | N | SER | C | 127 | 55.571 | 121.484 | 42.558 | 1.00 | 46.20 | C |
| ATOM | 3188 | CA | SER | C | 127 | 54.811 | 121.980 | 41.422 | 1.00 | 46.20 | C |
| ATOM | 3189 | CB | SER | C | 127 | 54.608 | 120.827 | 40.435 | 1.00 | 43.03 | C |
| ATOM | 3190 | OG | SER | C | 127 | 53.761 | 121.188 | 39.364 | 1.00 | 43.03 | C |
| ATOM | 3191 | C | SER | C | 127 | 53.462 | 122.581 | 41.839 | 1.00 | 46.20 | C |
| ATOM | 3192 | O | SER | C | 127 | 52.731 | 122.004 | 42.652 | 1.00 | 46.20 | C |
| ATOM | 3193 | N | GLU | C | 128 | 53.137 | 123.744 | 41.282 | 1.00 | 59.57 | C |
| ATOM | 3194 | CA | GLU | C | 128 | 51.879 | 124.406 | 41.597 | 1.00 | 59.57 | C |
| ATOM | 3195 | CB | GLU | C | 128 | 51.820 | 125.785 | 40.946 | 1.00 | 93.76 | C |
| ATOM | 3196 | CG | GLU | C | 128 | 52.544 | 126.866 | 41.714 | 1.00 | 93.76 | C |
| ATOM | 3197 | CD | GLU | C | 128 | 52.290 | 128.248 | 41.139 | 1.00 | 93.76 | C |
| ATOM | 3198 | OE1 | GLU | C | 128 | 51.103 | 128.605 | 40.950 | 1.00 | 93.76 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3199 | OE2 | GLU | C | 128 | 53.275 | 128.978 | 40.883 | 1.00 | 93.76 | C |
| ATOM | 3200 | C | GLU | C | 128 | 50.690 | 123.577 | 41.132 | 1.00 | 59.57 | C |
| ATOM | 3201 | O | GLU | C | 128 | 49.720 | 123.394 | 41.868 | 1.00 | 59.57 | C |
| ATOM | 3202 | N | LYS | C | 129 | 50.769 | 123.077 | 39.904 | 1.00 | 49.47 | C |
| ATOM | 3203 | CA | LYS | C | 129 | 49.697 | 122.268 | 39.345 | 1.00 | 49.47 | C |
| ATOM | 3204 | CB | LYS | C | 129 | 49.317 | 122.792 | 37.958 | 1.00 | 99.12 | C |
| ATOM | 3205 | CG | LYS | C | 129 | 48.730 | 124.194 | 37.984 | 1.00 | 99.12 | C |
| ATOM | 3206 | CD | LYS | C | 129 | 48.259 | 124.639 | 36.608 | 1.00 | 99.12 | C |
| ATOM | 3207 | CE | LYS | C | 129 | 47.640 | 126.034 | 36.661 | 1.00 | 99.12 | C |
| ATOM | 3208 | NZ | LYS | C | 129 | 47.140 | 126.488 | 35.329 | 1.00 | 99.12 | C |
| ATOM | 3209 | C | LYS | C | 129 | 50.068 | 120.789 | 39.260 | 1.00 | 49.47 | C |
| ATOM | 3210 | O | LYS | C | 129 | 51.244 | 120.419 | 39.266 | 1.00 | 49.47 | C |
| ATOM | 3211 | N | LEU | C | 130 | 49.050 | 119.946 | 39.188 | 1.00 | 60.11 | C |
| ATOM | 3212 | CA | LEU | C | 130 | 49.265 | 118.517 | 39.094 | 1.00 | 60.11 | C |
| ATOM | 3213 | CB | LEU | C | 130 | 48.028 | 117.763 | 39.584 | 1.00 | 52.06 | C |
| ATOM | 3214 | CG | LEU | C | 130 | 48.148 | 116.241 | 39.669 | 1.00 | 52.06 | C |
| ATOM | 3215 | CD1 | LEU | C | 130 | 49.190 | 115.871 | 40.699 | 1.00 | 52.06 | C |
| ATOM | 3216 | CD2 | LEU | C | 130 | 46.804 | 115.652 | 40.052 | 1.00 | 52.06 | C |
| ATOM | 3217 | C | LEU | C | 130 | 49.531 | 118.172 | 37.639 | 1.00 | 60.11 | C |
| ATOM | 3218 | O | LEU | C | 130 | 48.632 | 118.245 | 36.811 | 1.00 | 60.11 | C |
| ATOM | 3219 | N | THR | C | 131 | 50.765 | 117.802 | 37.324 | 1.00 | 39.89 | C |
| ATOM | 3220 | CA | THR | C | 131 | 51.115 | 117.452 | 35.955 | 1.00 | 39.89 | C |
| ATOM | 3221 | CB | THR | C | 131 | 52.198 | 118.389 | 35.399 | 1.00 | 44.42 | C |
| ATOM | 3222 | OG1 | THR | C | 131 | 53.430 | 118.166 | 36.100 | 1.00 | 44.42 | C |
| ATOM | 3223 | CG2 | THR | C | 131 | 51.772 | 119.845 | 35.572 | 1.00 | 44.42 | C |
| ATOM | 3224 | C | THR | C | 131 | 51.636 | 116.028 | 35.900 | 1.00 | 39.89 | C |
| ATOM | 3225 | O | THR | C | 131 | 51.732 | 115.350 | 36.924 | 1.00 | 39.89 | C |
| ATOM | 3226 | N | GLN | C | 132 | 51.969 | 115.569 | 34.702 | 1.00 | 46.49 | C |
| ATOM | 3227 | CA | GLN | C | 132 | 52.488 | 114.220 | 34.545 | 1.00 | 46.49 | C |
| ATOM | 3228 | CB | GLN | C | 132 | 52.669 | 113.906 | 33.067 | 1.00 | 55.46 | C |
| ATOM | 3229 | CG | GLN | C | 132 | 51.365 | 113.607 | 32.367 | 1.00 | 55.46 | C |
| ATOM | 3230 | CD | GLN | C | 132 | 51.522 | 113.510 | 30.870 | 1.00 | 55.46 | C |
| ATOM | 3231 | OE1 | GLN | C | 132 | 52.541 | 113.033 | 30.382 | 1.00 | 55.46 | C |
| ATOM | 3232 | NE2 | GLN | C | 132 | 50.506 | 113.950 | 30.129 | 1.00 | 55.46 | C |
| ATOM | 3233 | C | GLN | C | 132 | 53.800 | 114.040 | 35.302 | 1.00 | 46.49 | C |
| ATOM | 3234 | O | GLN | C | 132 | 54.164 | 112.921 | 35.656 | 1.00 | 46.49 | C |
| ATOM | 3235 | N | GLU | C | 133 | 54.497 | 115.144 | 35.566 | 1.00 | 41.72 | C |
| ATOM | 3236 | CA | GLU | C | 133 | 55.765 | 115.082 | 36.294 | 1.00 | 41.72 | C |
| ATOM | 3237 | CB | GLU | C | 133 | 56.607 | 116.334 | 36.039 | 1.00 | 47.86 | C |
| ATOM | 3238 | CG | GLU | C | 133 | 56.918 | 116.622 | 34.588 | 1.00 | 47.86 | C |
| ATOM | 3239 | CD | GLU | C | 133 | 58.126 | 117.534 | 34.430 | 1.00 | 47.86 | C |
| ATOM | 3240 | OE1 | GLU | C | 133 | 58.312 | 118.442 | 35.271 | 1.00 | 47.86 | C |
| ATOM | 3241 | OE2 | GLU | C | 133 | 58.890 | 117.349 | 33.459 | 1.00 | 47.86 | C |
| ATOM | 3242 | C | GLU | C | 133 | 55.534 | 114.940 | 37.799 | 1.00 | 41.72 | C |
| ATOM | 3243 | O | GLU | C | 133 | 56.487 | 114.903 | 38.581 | 1.00 | 41.72 | C |
| ATOM | 3244 | N | CYS | C | 134 | 54.264 | 114.855 | 38.194 | 1.00 | 41.75 | C |
| ATOM | 3245 | CA | CYS | C | 134 | 53.898 | 114.720 | 39.602 | 1.00 | 41.75 | C |
| ATOM | 3246 | CB | CYS | C | 134 | 52.918 | 115.828 | 39.986 | 1.00 | 38.75 | C |
| ATOM | 3247 | SG | CYS | C | 134 | 53.502 | 117.458 | 39.551 | 1.00 | 38.75 | C |
| ATOM | 3248 | C | CYS | C | 134 | 53.273 | 113.362 | 39.922 | 1.00 | 41.75 | C |
| ATOM | 3249 | O | CYS | C | 134 | 52.767 | 113.145 | 41.021 | 1.00 | 41.75 | C |
| ATOM | 3250 | N | VAL | C | 135 | 53.302 | 112.456 | 38.954 | 1.00 | 40.65 | C |
| ATOM | 3251 | CA | VAL | C | 135 | 52.733 | 111.130 | 39.139 | 1.00 | 40.65 | C |
| ATOM | 3252 | CB | VAL | C | 135 | 51.840 | 110.751 | 37.939 | 1.00 | 28.55 | C |
| ATOM | 3253 | CG1 | VAL | C | 135 | 51.197 | 109.396 | 38.165 | 1.00 | 28.55 | C |
| ATOM | 3254 | CG2 | VAL | C | 135 | 50.766 | 111.822 | 37.746 | 1.00 | 28.55 | C |
| ATOM | 3255 | C | VAL | C | 135 | 53.875 | 110.141 | 39.293 | 1.00 | 40.65 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3256 | O | VAL | C | 135 | 54.719 | 110.015 | 38.419 | 1.00 | 40.65 | C |
| ATOM | 3257 | N | PHE | C | 136 | 53.902 | 109.444 | 40.419 | 1.00 | 42.01 | C |
| ATOM | 3258 | CA | PHE | C | 136 | 54.974 | 108.504 | 40.697 | 1.00 | 42.01 | C |
| ATOM | 3259 | CB | PHE | C | 136 | 55.696 | 108.917 | 41.984 | 1.00 | 39.60 | C |
| ATOM | 3260 | CG | PHE | C | 136 | 56.400 | 110.234 | 41.885 | 1.00 | 39.60 | C |
| ATOM | 3261 | CD1 | PHE | C | 136 | 57.717 | 110.300 | 41.439 | 1.00 | 39.60 | C |
| ATOM | 3262 | CD2 | PHE | C | 136 | 55.736 | 111.414 | 42.203 | 1.00 | 39.60 | C |
| ATOM | 3263 | CE1 | PHE | C | 136 | 58.368 | 111.534 | 41.315 | 1.00 | 39.60 | C |
| ATOM | 3264 | CE2 | PHE | C | 136 | 56.375 | 112.650 | 42.081 | 1.00 | 39.60 | C |
| ATOM | 3265 | CZ | PHE | C | 136 | 57.696 | 112.712 | 41.635 | 1.00 | 39.60 | C |
| ATOM | 3266 | C | PHE | C | 136 | 54.522 | 107.067 | 40.838 | 1.00 | 42.01 | C |
| ATOM | 3267 | O | PHE | C | 136 | 53.387 | 106.783 | 41.226 | 1.00 | 42.01 | C |
| ATOM | 3268 | N | ARG | C | 137 | 55.435 | 106.160 | 40.524 | 1.00 | 40.27 | C |
| ATOM | 3269 | CA | ARG | C | 137 | 55.167 | 104.742 | 40.643 | 1.00 | 40.27 | C |
| ATOM | 3270 | CB | ARG | C | 137 | 56.026 | 103.948 | 39.666 | 1.00 | 54.39 | C |
| ATOM | 3271 | CG | ARG | C | 137 | 55.779 | 104.298 | 38.226 | 1.00 | 54.39 | C |
| ATOM | 3272 | CD | ARG | C | 137 | 56.588 | 103.397 | 37.325 | 1.00 | 54.39 | C |
| ATOM | 3273 | NE | ARG | C | 137 | 56.189 | 103.549 | 35.930 | 1.00 | 54.39 | C |
| ATOM | 3274 | CZ | ARG | C | 137 | 56.601 | 102.757 | 34.947 | 1.00 | 54.39 | C |
| ATOM | 3275 | NH1 | ARG | C | 137 | 57.430 | 101.749 | 35.203 | 1.00 | 54.39 | C |
| ATOM | 3276 | NH2 | ARG | C | 137 | 56.176 | 102.975 | 33.709 | 1.00 | 54.39 | C |
| ATOM | 3277 | C | ARG | C | 137 | 55.550 | 104.368 | 42.054 | 1.00 | 40.27 | C |
| ATOM | 3278 | O | ARG | C | 137 | 56.718 | 104.475 | 42.430 | 1.00 | 40.27 | C |
| ATOM | 3279 | N | GLU | C | 138 | 54.566 | 103.954 | 42.841 | 1.00 | 50.01 | C |
| ATOM | 3280 | CA | GLU | C | 138 | 54.812 | 103.547 | 44.222 | 1.00 | 50.01 | C |
| ATOM | 3281 | CB | GLU | C | 138 | 53.698 | 104.067 | 45.131 | 1.00 | 51.01 | C |
| ATOM | 3282 | CG | GLU | C | 138 | 53.764 | 103.577 | 46.564 | 1.00 | 51.01 | C |
| ATOM | 3283 | CD | GLU | C | 138 | 52.630 | 104.140 | 47.408 | 1.00 | 51.01 | C |
| ATOM | 3284 | OE1 | GLU | C | 138 | 51.460 | 103.892 | 47.055 | 1.00 | 51.01 | C |
| ATOM | 3285 | OE2 | GLU | C | 138 | 52.899 | 104.834 | 48.414 | 1.00 | 51.01 | C |
| ATOM | 3286 | C | GLU | C | 138 | 54.849 | 102.028 | 44.252 | 1.00 | 50.01 | C |
| ATOM | 3287 | O | GLU | C | 138 | 53.891 | 101.371 | 43.871 | 1.00 | 50.01 | C |
| ATOM | 3288 | N | GLN | C | 139 | 55.964 | 101.466 | 44.684 | 1.00 | 48.38 | C |
| ATOM | 3289 | CA | GLN | C | 139 | 56.074 | 100.018 | 44.732 | 1.00 | 48.38 | C |
| ATOM | 3290 | CB | GLN | C | 139 | 56.854 | 99.516 | 43.524 | 1.00 | 41.67 | C |
| ATOM | 3291 | CG | GLN | C | 139 | 56.224 | 99.881 | 42.190 | 1.00 | 41.67 | C |
| ATOM | 3292 | CD | GLN | C | 139 | 57.148 | 99.561 | 41.040 | 1.00 | 41.67 | C |
| ATOM | 3293 | OE1 | GLN | C | 139 | 58.258 | 99.047 | 41.250 | 1.00 | 41.67 | C |
| ATOM | 3294 | NE2 | GLN | C | 139 | 56.708 | 99.857 | 39.818 | 1.00 | 41.67 | C |
| ATOM | 3295 | C | GLN | C | 139 | 56.764 | 99.592 | 46.004 | 1.00 | 48.38 | C |
| ATOM | 3296 | O | GLN | C | 139 | 57.718 | 100.235 | 46.438 | 1.00 | 48.38 | C |
| ATOM | 3297 | N | PHE | C | 140 | 56.279 | 98.506 | 46.600 | 1.00 | 56.42 | C |
| ATOM | 3298 | CA | PHE | C | 140 | 56.853 | 98.012 | 47.843 | 1.00 | 56.42 | C |
| ATOM | 3299 | CB | PHE | C | 140 | 56.128 | 96.758 | 48.319 | 1.00 | 75.58 | C |
| ATOM | 3300 | CG | PHE | C | 140 | 56.599 | 96.272 | 49.657 | 1.00 | 75.58 | C |
| ATOM | 3301 | CD1 | PHE | C | 140 | 56.033 | 96.763 | 50.828 | 1.00 | 75.58 | C |
| ATOM | 3302 | CD2 | PHE | C | 140 | 57.637 | 95.348 | 49.750 | 1.00 | 75.58 | C |
| ATOM | 3303 | CE1 | PHE | C | 140 | 56.494 | 96.339 | 52.072 | 1.00 | 75.58 | C |
| ATOM | 3304 | CE2 | PHE | C | 140 | 58.104 | 94.923 | 50.989 | 1.00 | 75.58 | C |
| ATOM | 3305 | CZ | PHE | C | 140 | 57.532 | 95.418 | 52.151 | 1.00 | 75.58 | C |
| ATOM | 3306 | C | PHE | C | 140 | 58.330 | 97.690 | 47.694 | 1.00 | 56.42 | C |
| ATOM | 3307 | O | PHE | C | 140 | 58.776 | 97.252 | 46.635 | 1.00 | 56.42 | C |
| ATOM | 3308 | N | GLU | C | 141 | 59.082 | 97.895 | 48.766 | 1.00 | 71.76 | C |
| ATOM | 3309 | CA | GLU | C | 141 | 60.502 | 97.616 | 48.736 | 1.00 | 71.76 | C |
| ATOM | 3310 | CB | GLU | C | 141 | 61.290 | 98.924 | 48.684 | 1.00 | 58.43 | C |
| ATOM | 3311 | CG | GLU | C | 141 | 62.814 | 98.771 | 48.681 | 1.00 | 58.43 | C |
| ATOM | 3312 | CD | GLU | C | 141 | 63.351 | 98.081 | 47.435 | 1.00 | 58.43 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3313 | OE1 | GLU | C | 141 | 62.738 | 98.225 | 46.353 | 1.00 | 58.43 | C |
| ATOM | 3314 | OE2 | GLU | C | 141 | 64.401 | 97.406 | 47.535 | 1.00 | 58.43 | C |
| ATOM | 3315 | C | GLU | C | 141 | 60.960 | 96.792 | 49.931 | 1.00 | 71.76 | C |
| ATOM | 3316 | O | GLU | C | 141 | 61.148 | 95.583 | 49.819 | 1.00 | 71.76 | C |
| ATOM | 3317 | N | GLU | C | 142 | 61.119 | 97.443 | 51.079 | 1.00 | 88.30 | C |
| ATOM | 3318 | CA | GLU | C | 142 | 61.610 | 96.771 | 52.276 | 1.00 | 88.30 | C |
| ATOM | 3319 | CB | GLU | C | 142 | 63.128 | 97.005 | 52.366 | 1.00 | 89.84 | C |
| ATOM | 3320 | CG | GLU | C | 142 | 63.762 | 96.885 | 53.753 | 1.00 | 89.84 | C |
| ATOM | 3321 | CD | GLU | C | 142 | 64.235 | 98.229 | 54.316 | 1.00 | 89.84 | C |
| ATOM | 3322 | OE1 | GLU | C | 142 | 64.832 | 99.030 | 53.560 | 1.00 | 89.84 | C |
| ATOM | 3323 | OE2 | GLU | C | 142 | 64.023 | 98.477 | 55.522 | 1.00 | 89.84 | C |
| ATOM | 3324 | C | GLU | C | 142 | 60.930 | 97.196 | 53.576 | 1.00 | 88.30 | C |
| ATOM | 3325 | O | GLU | C | 142 | 60.989 | 98.360 | 53.964 | 1.00 | 88.30 | C |
| ATOM | 3326 | N | ASN | C | 143 | 60.288 | 96.240 | 54.242 | 1.00 | 62.50 | C |
| ATOM | 3327 | CA | ASN | C | 143 | 59.619 | 96.485 | 55.519 | 1.00 | 62.50 | C |
| ATOM | 3328 | CB | ASN | C | 143 | 60.656 | 96.683 | 56.625 | 1.00 | 82.91 | C |
| ATOM | 3329 | CG | ASN | C | 143 | 61.461 | 95.431 | 56.896 | 1.00 | 82.91 | C |
| ATOM | 3330 | OD1 | ASN | C | 143 | 60.933 | 94.442 | 57.399 | 1.00 | 82.91 | C |
| ATOM | 3331 | ND2 | ASN | C | 143 | 62.746 | 95.464 | 56.555 | 1.00 | 82.91 | C |
| ATOM | 3332 | C | ASN | C | 143 | 58.681 | 97.679 | 55.499 | 1.00 | 62.50 | C |
| ATOM | 3333 | O | ASN | C | 143 | 58.748 | 98.552 | 56.370 | 1.00 | 62.50 | C |
| ATOM | 3334 | N | TRP | C | 144 | 57.806 | 97.705 | 54.500 | 1.00 | 57.36 | C |
| ATOM | 3335 | CA | TRP | C | 144 | 56.824 | 98.765 | 54.334 | 1.00 | 57.36 | C |
| ATOM | 3336 | CB | TRP | C | 144 | 56.110 | 99.002 | 55.660 | 1.00 | 49.59 | C |
| ATOM | 3337 | CG | TRP | C | 144 | 55.271 | 97.819 | 55.972 | 1.00 | 49.59 | C |
| ATOM | 3338 | CD2 | TRP | C | 144 | 54.223 | 97.294 | 55.153 | 1.00 | 49.59 | C |
| ATOM | 3339 | CE2 | TRP | C | 144 | 53.766 | 96.110 | 55.768 | 1.00 | 49.59 | C |
| ATOM | 3340 | CE3 | TRP | C | 144 | 53.631 | 97.709 | 53.953 | 1.00 | 49.59 | C |
| ATOM | 3341 | CD1 | TRP | C | 144 | 55.400 | 96.963 | 57.030 | 1.00 | 49.59 | C |
| ATOM | 3342 | NE1 | TRP | C | 144 | 54.499 | 95.932 | 56.913 | 1.00 | 49.59 | C |
| ATOM | 3343 | CZ2 | TRP | C | 144 | 52.734 | 95.333 | 55.223 | 1.00 | 49.59 | C |
| ATOM | 3344 | CZ3 | TRP | C | 144 | 52.604 | 96.937 | 53.409 | 1.00 | 49.59 | C |
| ATOM | 3345 | CH2 | TRP | C | 144 | 52.169 | 95.759 | 54.047 | 1.00 | 49.59 | C |
| ATOM | 3346 | C | TRP | C | 144 | 57.356 | 100.055 | 53.730 | 1.00 | 57.36 | C |
| ATOM | 3347 | O | TRP | C | 144 | 56.619 | 101.025 | 53.561 | 1.00 | 57.36 | C |
| ATOM | 3348 | N | TYR | C | 145 | 58.644 | 100.055 | 53.406 | 1.00 | 52.11 | C |
| ATOM | 3349 | CA | TYR | C | 145 | 59.263 | 101.187 | 52.738 | 1.00 | 52.11 | C |
| ATOM | 3350 | CB | TYR | C | 145 | 60.785 | 101.147 | 52.863 | 1.00 | 49.32 | C |
| ATOM | 3351 | CG | TYR | C | 145 | 61.349 | 101.742 | 54.122 | 1.00 | 49.32 | C |
| ATOM | 3352 | CD1 | TYR | C | 145 | 61.249 | 101.079 | 55.342 | 1.00 | 49.32 | C |
| ATOM | 3353 | CE1 | TYR | C | 145 | 61.802 | 101.623 | 56.504 | 1.00 | 49.32 | C |
| ATOM | 3354 | CD2 | TYR | C | 145 | 62.008 | 102.964 | 54.090 | 1.00 | 49.32 | C |
| ATOM | 3355 | CE2 | TYR | C | 145 | 62.560 | 103.516 | 55.240 | 1.00 | 49.32 | C |
| ATOM | 3356 | CZ | TYR | C | 145 | 62.456 | 102.843 | 56.441 | 1.00 | 49.32 | C |
| ATOM | 3357 | OH | TYR | C | 145 | 63.017 | 103.394 | 57.570 | 1.00 | 49.32 | C |
| ATOM | 3358 | C | TYR | C | 145 | 58.908 | 100.977 | 51.269 | 1.00 | 52.11 | C |
| ATOM | 3359 | O | TYR | C | 145 | 58.761 | 99.840 | 50.819 | 1.00 | 52.11 | C |
| ATOM | 3360 | N | ASN | C | 146 | 58.755 | 102.061 | 50.524 | 1.00 | 46.62 | C |
| ATOM | 3361 | CA | ASN | C | 146 | 58.451 | 101.947 | 49.107 | 1.00 | 46.62 | C |
| ATOM | 3362 | CB | ASN | C | 146 | 57.070 | 102.513 | 48.779 | 1.00 | 47.96 | C |
| ATOM | 3363 | CG | ASN | C | 146 | 55.984 | 101.963 | 49.666 | 1.00 | 47.96 | C |
| ATOM | 3364 | OD1 | ASN | C | 146 | 55.822 | 100.750 | 49.791 | 1.00 | 47.96 | C |
| ATOM | 3365 | ND2 | ASN | C | 146 | 55.220 | 102.857 | 50.283 | 1.00 | 47.96 | C |
| ATOM | 3366 | C | ASN | C | 146 | 59.476 | 102.761 | 48.346 | 1.00 | 46.62 | C |
| ATOM | 3367 | O | ASN | C | 146 | 60.332 | 103.428 | 48.941 | 1.00 | 46.62 | C |
| ATOM | 3368 | N | THR | C | 147 | 59.401 | 102.673 | 47.025 | 1.00 | 45.12 | C |
| ATOM | 3369 | CA | THR | C | 147 | 60.259 | 103.461 | 46.164 | 1.00 | 45.12 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3370 | CB | THR | C | 147 | 61.132 | 102.623 | 45.199 | 1.00 | 38.21 | C |
| ATOM | 3371 | OG1 | THR | C | 147 | 60.297 | 101.774 | 44.399 | 1.00 | 38.21 | C |
| ATOM | 3372 | CG2 | THR | C | 147 | 62.151 | 101.808 | 45.969 | 1.00 | 38.21 | C |
| ATOM | 3373 | C | THR | C | 147 | 59.249 | 104.225 | 45.342 | 1.00 | 45.12 | C |
| ATOM | 3374 | O | THR | C | 147 | 58.133 | 103.750 | 45.111 | 1.00 | 45.12 | C |
| ATOM | 3375 | N | TYR | C | 148 | 59.639 | 105.416 | 44.922 | 1.00 | 38.47 | C |
| ATOM | 3376 | CA | TYR | C | 148 | 58.781 | 106.260 | 44.126 | 1.00 | 38.47 | C |
| ATOM | 3377 | CB | TYR | C | 148 | 58.378 | 107.477 | 44.954 | 1.00 | 38.18 | C |
| ATOM | 3378 | CG | TYR | C | 148 | 57.494 | 107.098 | 46.113 | 1.00 | 38.18 | C |
| ATOM | 3379 | CD1 | TYR | C | 148 | 56.109 | 107.047 | 45.968 | 1.00 | 38.18 | C |
| ATOM | 3380 | CE1 | TYR | C | 148 | 55.298 | 106.599 | 46.989 | 1.00 | 38.18 | C |
| ATOM | 3381 | CD2 | TYR | C | 148 | 58.042 | 106.693 | 47.322 | 1.00 | 38.18 | C |
| ATOM | 3382 | CE2 | TYR | C | 148 | 57.238 | 106.236 | 48.359 | 1.00 | 38.18 | C |
| ATOM | 3383 | CZ | TYR | C | 148 | 55.870 | 106.190 | 48.184 | 1.00 | 38.18 | C |
| ATOM | 3384 | OH | TYR | C | 148 | 55.072 | 105.723 | 49.197 | 1.00 | 38.18 | C |
| ATOM | 3385 | C | TYR | C | 148 | 59.610 | 106.648 | 42.933 | 1.00 | 38.47 | C |
| ATOM | 3386 | O | TYR | C | 148 | 60.638 | 107.303 | 43.068 | 1.00 | 38.47 | C |
| ATOM | 3387 | N | SER | C | 149 | 59.183 | 106.221 | 41.755 | 1.00 | 40.04 | C |
| ATOM | 3388 | CA | SER | C | 149 | 59.933 | 106.546 | 40.557 | 1.00 | 40.04 | C |
| ATOM | 3389 | CB | SER | C | 149 | 60.432 | 105.273 | 39.872 | 1.00 | 43.44 | C |
| ATOM | 3390 | OG | SER | C | 149 | 59.375 | 104.635 | 39.181 | 1.00 | 43.44 | C |
| ATOM | 3391 | C | SER | C | 149 | 59.035 | 107.303 | 39.615 | 1.00 | 40.04 | C |
| ATOM | 3392 | O | SER | C | 149 | 57.825 | 107.099 | 39.610 | 1.00 | 40.04 | C |
| ATOM | 3393 | N | SER | C | 150 | 59.630 | 108.191 | 38.828 | 1.00 | 43.81 | C |
| ATOM | 3394 | CA | SER | C | 150 | 58.873 | 108.959 | 37.860 | 1.00 | 43.81 | C |
| ATOM | 3395 | CB | SER | C | 150 | 59.799 | 109.869 | 37.060 | 1.00 | 37.57 | C |
| ATOM | 3396 | OG | SER | C | 150 | 59.130 | 110.395 | 35.918 | 1.00 | 37.57 | C |
| ATOM | 3397 | C | SER | C | 150 | 58.184 | 107.987 | 36.914 | 1.00 | 43.81 | C |
| ATOM | 3398 | O | SER | C | 150 | 58.746 | 106.957 | 36.531 | 1.00 | 43.81 | C |
| ATOM | 3399 | N | ASN | C | 151 | 56.962 | 108.319 | 36.539 | 1.00 | 40.85 | C |
| ATOM | 3400 | CA | ASN | C | 151 | 56.205 | 107.486 | 35.632 | 1.00 | 40.85 | C |
| ATOM | 3401 | CB | ASN | C | 151 | 54.745 | 107.446 | 36.073 | 1.00 | 48.31 | C |
| ATOM | 3402 | CG | ASN | C | 151 | 53.958 | 106.377 | 35.364 | 1.00 | 48.31 | C |
| ATOM | 3403 | OD1 | ASN | C | 151 | 54.349 | 105.211 | 35.356 | 1.00 | 48.31 | C |
| ATOM | 3404 | ND2 | ASN | C | 151 | 52.844 | 106.762 | 34.770 | 1.00 | 48.31 | C |
| ATOM | 3405 | C | ASN | C | 151 | 56.323 | 108.110 | 34.246 | 1.00 | 40.85 | C |
| ATOM | 3406 | O | ASN | C | 151 | 55.640 | 107.718 | 33.312 | 1.00 | 40.85 | C |
| ATOM | 3407 | N | LEU | C | 152 | 57.216 | 109.080 | 34.121 | 1.00 | 40.06 | C |
| ATOM | 3408 | CA | LEU | C | 152 | 57.405 | 109.780 | 32.861 | 1.00 | 40.06 | C |
| ATOM | 3409 | CB | LEU | C | 152 | 56.957 | 111.232 | 33.034 | 1.00 | 41.49 | C |
| ATOM | 3410 | CG | LEU | C | 152 | 57.124 | 112.179 | 31.855 | 1.00 | 41.49 | C |
| ATOM | 3411 | CD1 | LEU | C | 152 | 56.460 | 111.593 | 30.617 | 1.00 | 41.49 | C |
| ATOM | 3412 | CD2 | LEU | C | 152 | 56.506 | 113.520 | 32.218 | 1.00 | 41.49 | C |
| ATOM | 3413 | C | LEU | C | 152 | 58.840 | 109.752 | 32.345 | 1.00 | 40.06 | C |
| ATOM | 3414 | O | LEU | C | 152 | 59.073 | 109.688 | 31.146 | 1.00 | 40.06 | C |
| ATOM | 3415 | N | TYR | C | 153 | 59.802 | 109.800 | 33.252 | 1.00 | 43.87 | C |
| ATOM | 3416 | CA | TYR | C | 153 | 61.193 | 109.816 | 32.839 | 1.00 | 43.87 | C |
| ATOM | 3417 | CB | TYR | C | 153 | 61.866 | 111.075 | 33.372 | 1.00 | 35.17 | C |
| ATOM | 3418 | CG | TYR | C | 153 | 61.189 | 112.317 | 32.860 | 1.00 | 35.17 | C |
| ATOM | 3419 | CD1 | TYR | C | 153 | 61.026 | 112.521 | 31.483 | 1.00 | 35.17 | C |
| ATOM | 3420 | CE1 | TYR | C | 153 | 60.382 | 113.657 | 30.994 | 1.00 | 35.17 | C |
| ATOM | 3421 | CD2 | TYR | C | 153 | 60.692 | 113.279 | 33.738 | 1.00 | 35.17 | C |
| ATOM | 3422 | CE2 | TYR | C | 153 | 60.050 | 114.417 | 33.261 | 1.00 | 35.17 | C |
| ATOM | 3423 | CZ | TYR | C | 153 | 59.898 | 114.601 | 31.890 | 1.00 | 35.17 | C |
| ATOM | 3424 | OH | TYR | C | 153 | 59.269 | 115.724 | 31.413 | 1.00 | 35.17 | C |
| ATOM | 3425 | C | TYR | C | 153 | 61.949 | 108.589 | 33.272 | 1.00 | 43.87 | C |
| ATOM | 3426 | O | TYR | C | 153 | 61.646 | 107.994 | 34.304 | 1.00 | 43.87 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3427 | N | LYS | C | 154 | 62.939 | 108.218 | 32.471 | 1.00 | 45.23 | C |
| ATOM | 3428 | CA | LYS | C | 154 | 63.742 | 107.036 | 32.744 | 1.00 | 45.23 | C |
| ATOM | 3429 | CB | LYS | C | 154 | 62.946 | 105.784 | 32.376 | 1.00 | 55.04 | C |
| ATOM | 3430 | CG | LYS | C | 154 | 62.530 | 105.792 | 30.921 | 1.00 | 55.04 | C |
| ATOM | 3431 | CD | LYS | C | 154 | 62.062 | 104.444 | 30.432 | 1.00 | 55.04 | C |
| ATOM | 3432 | CE | LYS | C | 154 | 61.727 | 104.521 | 28.948 | 1.00 | 55.04 | C |
| ATOM | 3433 | NZ | LYS | C | 154 | 61.382 | 103.186 | 28.370 | 1.00 | 55.04 | C |
| ATOM | 3434 | C | LYS | C | 154 | 65.021 | 107.042 | 31.918 | 1.00 | 45.23 | C |
| ATOM | 3435 | O | LYS | C | 154 | 65.247 | 107.932 | 31.098 | 1.00 | 45.23 | C |
| ATOM | 3436 | N | HIS | C | 155 | 65.849 | 106.032 | 32.154 | 1.00 | 43.29 | C |
| ATOM | 3437 | CA | HIS | C | 155 | 67.082 | 105.840 | 31.407 | 1.00 | 43.29 | C |
| ATOM | 3438 | CB | HIS | C | 155 | 68.026 | 104.935 | 32.192 | 1.00 | 45.88 | C |
| ATOM | 3439 | CG | HIS | C | 155 | 68.584 | 105.569 | 33.428 | 1.00 | 45.88 | C |
| ATOM | 3440 | CD2 | HIS | C | 155 | 68.266 | 105.409 | 34.735 | 1.00 | 45.88 | C |
| ATOM | 3441 | ND1 | HIS | C | 155 | 69.597 | 106.503 | 33.392 | 1.00 | 45.88 | C |
| ATOM | 3442 | CE1 | HIS | C | 155 | 69.881 | 106.891 | 34.624 | 1.00 | 45.88 | C |
| ATOM | 3443 | NE2 | HIS | C | 155 | 69.086 | 106.243 | 35.458 | 1.00 | 45.88 | C |
| ATOM | 3444 | C | HIS | C | 155 | 66.621 | 105.133 | 30.135 | 1.00 | 43.29 | C |
| ATOM | 3445 | O | HIS | C | 155 | 66.205 | 103.980 | 30.187 | 1.00 | 43.29 | C |
| ATOM | 3446 | N | VAL | C | 156 | 66.665 | 105.825 | 29.001 | 1.00 | 41.62 | C |
| ATOM | 3447 | CA | VAL | C | 156 | 66.216 | 105.241 | 27.743 | 1.00 | 41.62 | C |
| ATOM | 3448 | CB | VAL | C | 156 | 66.141 | 106.293 | 26.619 | 1.00 | 38.44 | C |
| ATOM | 3449 | CG1 | VAL | C | 156 | 65.068 | 107.330 | 26.938 | 1.00 | 38.44 | C |
| ATOM | 3450 | CG2 | VAL | C | 156 | 67.508 | 106.952 | 26.435 | 1.00 | 38.44 | C |
| ATOM | 3451 | C | VAL | C | 156 | 67.082 | 104.097 | 27.234 | 1.00 | 41.62 | C |
| ATOM | 3452 | O | VAL | C | 156 | 66.609 | 103.257 | 26.475 | 1.00 | 41.62 | C |
| ATOM | 3453 | N | ASP | C | 157 | 68.343 | 104.053 | 27.643 | 1.00 | 42.66 | C |
| ATOM | 3454 | CA | ASP | C | 157 | 69.233 | 103.000 | 27.170 | 1.00 | 42.66 | C |
| ATOM | 3455 | CB | ASP | C | 157 | 70.695 | 103.466 | 27.267 | 1.00 | 47.85 | C |
| ATOM | 3456 | CG | ASP | C | 157 | 71.116 | 103.810 | 28.691 | 1.00 | 47.85 | C |
| ATOM | 3457 | OD1 | ASP | C | 157 | 70.240 | 104.155 | 29.513 | 1.00 | 47.85 | C |
| ATOM | 3458 | OD2 | ASP | C | 157 | 72.332 | 103.751 | 28.984 | 1.00 | 47.85 | C |
| ATOM | 3459 | C | ASP | C | 157 | 69.050 | 101.667 | 27.888 | 1.00 | 42.66 | C |
| ATOM | 3460 | O | ASP | C | 157 | 69.129 | 100.608 | 27.263 | 1.00 | 42.66 | C |
| ATOM | 3461 | N | THR | C | 158 | 68.795 | 101.720 | 29.191 | 1.00 | 45.51 | C |
| ATOM | 3462 | CA | THR | C | 158 | 68.617 | 100.511 | 29.985 | 1.00 | 45.51 | C |
| ATOM | 3463 | CB | THR | C | 158 | 69.473 | 100.560 | 31.267 | 1.00 | 52.41 | C |
| ATOM | 3464 | OG1 | THR | C | 158 | 68.983 | 101.595 | 32.130 | 1.00 | 52.41 | C |
| ATOM | 3465 | CG2 | THR | C | 158 | 70.932 | 100.838 | 30.925 | 1.00 | 52.41 | C |
| ATOM | 3466 | C | THR | C | 158 | 67.165 | 100.301 | 30.394 | 1.00 | 45.51 | C |
| ATOM | 3467 | O | THR | C | 158 | 66.781 | 99.214 | 30.819 | 1.00 | 45.51 | C |
| ATOM | 3468 | N | GLY | C | 159 | 66.359 | 101.345 | 30.268 | 1.00 | 41.78 | C |
| ATOM | 3469 | CA | GLY | C | 159 | 64.965 | 101.238 | 30.643 | 1.00 | 41.78 | C |
| ATOM | 3470 | C | GLY | C | 159 | 64.757 | 101.414 | 32.136 | 1.00 | 41.78 | C |
| ATOM | 3471 | O | GLY | C | 159 | 63.618 | 101.533 | 32.593 | 1.00 | 41.78 | C |
| ATOM | 3472 | N | ARG | C | 160 | 65.845 | 101.436 | 32.903 | 1.00 | 39.85 | C |
| ATOM | 3473 | CA | ARG | C | 160 | 65.734 | 101.606 | 34.347 | 1.00 | 39.85 | C |
| ATOM | 3474 | CB | ARG | C | 160 | 67.095 | 101.393 | 35.010 | 1.00 | 69.78 | C |
| ATOM | 3475 | CG | ARG | C | 160 | 67.652 | 100.006 | 34.724 | 1.00 | 69.78 | C |
| ATOM | 3476 | CD | ARG | C | 160 | 68.850 | 99.647 | 35.586 | 1.00 | 69.78 | C |
| ATOM | 3477 | NE | ARG | C | 160 | 68.460 | 99.291 | 36.944 | 1.00 | 69.78 | C |
| ATOM | 3478 | CZ | ARG | C | 160 | 69.316 | 98.944 | 37.898 | 1.00 | 69.78 | C |
| ATOM | 3479 | NH1 | ARG | C | 160 | 70.621 | 98.903 | 37.643 | 1.00 | 69.78 | C |
| ATOM | 3480 | NH2 | ARG | C | 160 | 68.870 | 98.642 | 39.110 | 1.00 | 69.78 | C |
| ATOM | 3481 | C | ARG | C | 160 | 65.128 | 102.967 | 34.718 | 1.00 | 39.85 | C |
| ATOM | 3482 | O | ARG | C | 160 | 65.246 | 103.952 | 33.978 | 1.00 | 39.85 | C |
| ATOM | 3483 | N | ARG | C | 161 | 64.479 | 102.994 | 35.877 | 1.00 | 39.91 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3484 | CA | ARG | C | 161 | 63.760 | 104.161 | 36.397 | 1.00 | 39.91 | C |
| ATOM | 3485 | CB | ARG | C | 161 | 62.639 | 103.640 | 37.295 | 1.00 | 51.78 | C |
| ATOM | 3486 | CG | ARG | C | 161 | 61.673 | 102.773 | 36.529 | 1.00 | 51.78 | C |
| ATOM | 3487 | CD | ARG | C | 161 | 60.928 | 103.678 | 35.593 | 1.00 | 51.78 | C |
| ATOM | 3488 | NE | ARG | C | 161 | 60.408 | 103.015 | 34.418 | 1.00 | 51.78 | C |
| ATOM | 3489 | CZ | ARG | C | 161 | 59.597 | 103.608 | 33.548 | 1.00 | 51.78 | C |
| ATOM | 3490 | NH1 | ARG | C | 161 | 59.224 | 104.873 | 33.742 | 1.00 | 51.78 | C |
| ATOM | 3491 | NH2 | ARG | C | 161 | 59.166 | 102.939 | 32.482 | 1.00 | 51.78 | C |
| ATOM | 3492 | C | ARG | C | 161 | 64.509 | 105.269 | 37.135 | 1.00 | 39.91 | C |
| ATOM | 3493 | O | ARG | C | 161 | 65.636 | 105.089 | 37.573 | 1.00 | 39.91 | C |
| ATOM | 3494 | N | TYR | C | 162 | 63.854 | 106.423 | 37.248 | 1.00 | 39.62 | C |
| ATOM | 3495 | CA | TYR | C | 162 | 64.378 | 107.583 | 37.978 | 1.00 | 39.62 | C |
| ATOM | 3496 | CB | TYR | C | 162 | 64.043 | 108.894 | 37.272 | 1.00 | 43.92 | C |
| ATOM | 3497 | CG | TYR | C | 162 | 64.828 | 109.224 | 36.027 | 1.00 | 43.92 | C |
| ATOM | 3498 | CD1 | TYR | C | 162 | 65.860 | 108.407 | 35.568 | 1.00 | 43.92 | C |
| ATOM | 3499 | CE1 | TYR | C | 162 | 66.576 | 108.742 | 34.417 | 1.00 | 43.92 | C |
| ATOM | 3500 | CD2 | TYR | C | 162 | 64.536 | 110.378 | 35.302 | 1.00 | 43.92 | C |
| ATOM | 3501 | CE2 | TYR | C | 162 | 65.239 | 110.714 | 34.164 | 1.00 | 43.92 | C |
| ATOM | 3502 | CZ | TYR | C | 162 | 66.253 | 109.900 | 33.725 | 1.00 | 43.92 | C |
| ATOM | 3503 | OH | TYR | C | 162 | 66.938 | 110.259 | 32.591 | 1.00 | 43.92 | C |
| ATOM | 3504 | C | TYR | C | 162 | 63.647 | 107.580 | 39.322 | 1.00 | 39.62 | C |
| ATOM | 3505 | O | TYR | C | 162 | 62.426 | 107.748 | 39.361 | 1.00 | 39.62 | C |
| ATOM | 3506 | N | TYR | C | 163 | 64.386 | 107.406 | 40.413 | 1.00 | 37.53 | C |
| ATOM | 3507 | CA | TYR | C | 163 | 63.796 | 107.353 | 41.747 | 1.00 | 37.53 | C |
| ATOM | 3508 | CB | TYR | C | 163 | 64.380 | 106.174 | 42.536 | 1.00 | 45.85 | C |
| ATOM | 3509 | CG | TYR | C | 163 | 63.990 | 104.836 | 41.964 | 1.00 | 45.85 | C |
| ATOM | 3510 | CD1 | TYR | C | 163 | 64.654 | 104.303 | 40.860 | 1.00 | 45.85 | C |
| ATOM | 3511 | CE1 | TYR | C | 163 | 64.219 | 103.123 | 40.264 | 1.00 | 45.85 | C |
| ATOM | 3512 | CD2 | TYR | C | 163 | 62.888 | 104.145 | 42.466 | 1.00 | 45.85 | C |
| ATOM | 3513 | CE2 | TYR | C | 163 | 62.446 | 102.968 | 41.881 | 1.00 | 45.85 | C |
| ATOM | 3514 | CZ | TYR | C | 163 | 63.108 | 102.464 | 40.780 | 1.00 | 45.85 | C |
| ATOM | 3515 | OH | TYR | C | 163 | 62.624 | 101.328 | 40.172 | 1.00 | 45.85 | C |
| ATOM | 3516 | C | TYR | C | 163 | 63.929 | 108.610 | 42.593 | 1.00 | 37.53 | C |
| ATOM | 3517 | O | TYR | C | 163 | 64.946 | 109.309 | 42.547 | 1.00 | 37.53 | C |
| ATOM | 3518 | N | VAL | C | 164 | 62.873 | 108.880 | 43.364 | 1.00 | 34.97 | C |
| ATOM | 3519 | CA | VAL | C | 164 | 62.828 | 110.001 | 44.290 | 1.00 | 34.97 | C |
| ATOM | 3520 | CB | VAL | C | 164 | 61.439 | 110.111 | 44.968 | 1.00 | 31.66 | C |
| ATOM | 3521 | CG1 | VAL | C | 164 | 61.479 | 111.154 | 46.086 | 1.00 | 31.66 | C |
| ATOM | 3522 | CG2 | VAL | C | 164 | 60.378 | 110.483 | 43.938 | 1.00 | 31.66 | C |
| ATOM | 3523 | C | VAL | C | 164 | 63.849 | 109.598 | 45.341 | 1.00 | 34.97 | C |
| ATOM | 3524 | O | VAL | C | 164 | 63.898 | 108.439 | 45.733 | 1.00 | 34.97 | C |
| ATOM | 3525 | N | ALA | C | 165 | 64.669 | 110.531 | 45.806 | 1.00 | 36.75 | C |
| ATOM | 3526 | CA | ALA | C | 165 | 65.672 | 110.165 | 46.794 | 1.00 | 36.75 | C |
| ATOM | 3527 | CB | ALA | C | 165 | 66.783 | 109.359 | 46.113 | 1.00 | 31.20 | C |
| ATOM | 3528 | C | ALA | C | 165 | 66.276 | 111.340 | 47.541 | 1.00 | 36.75 | C |
| ATOM | 3529 | O | ALA | C | 165 | 66.374 | 112.439 | 47.013 | 1.00 | 36.75 | C |
| ATOM | 3530 | N | LEU | C | 166 | 66.674 | 111.086 | 48.781 | 1.00 | 44.55 | C |
| ATOM | 3531 | CA | LEU | C | 166 | 67.311 | 112.090 | 49.626 | 1.00 | 44.55 | C |
| ATOM | 3532 | CB | LEU | C | 166 | 66.497 | 112.337 | 50.905 | 1.00 | 33.70 | C |
| ATOM | 3533 | CG | LEU | C | 166 | 65.128 | 112.988 | 50.687 | 1.00 | 33.70 | C |
| ATOM | 3534 | CD1 | LEU | C | 166 | 64.403 | 113.171 | 52.016 | 1.00 | 33.70 | C |
| ATOM | 3535 | CD2 | LEU | C | 166 | 65.316 | 114.328 | 49.995 | 1.00 | 33.70 | C |
| ATOM | 3536 | C | LEU | C | 166 | 68.672 | 111.521 | 49.985 | 1.00 | 44.55 | C |
| ATOM | 3537 | O | LEU | C | 166 | 68.784 | 110.349 | 50.348 | 1.00 | 44.55 | C |
| ATOM | 3538 | N | ASN | C | 167 | 69.708 | 112.341 | 49.882 | 1.00 | 46.44 | C |
| ATOM | 3539 | CA | ASN | C | 167 | 71.053 | 111.877 | 50.202 | 1.00 | 46.44 | C |
| ATOM | 3540 | CB | ASN | C | 167 | 72.083 | 112.851 | 49.631 | 1.00 | 43.06 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3541 | CG | ASN | C | 167 | 72.140 | 112.799 | 48.124 | 1.00 | 43.06 | C |
| ATOM | 3542 | OD1 | ASN | C | 167 | 72.416 | 111.748 | 47.549 | 1.00 | 43.06 | C |
| ATOM | 3543 | ND2 | ASN | C | 167 | 71.873 | 113.925 | 47.473 | 1.00 | 43.06 | C |
| ATOM | 3544 | C | ASN | C | 167 | 71.307 | 111.664 | 51.696 | 1.00 | 46.44 | C |
| ATOM | 3545 | O | ASN | C | 167 | 70.527 | 112.106 | 52.545 | 1.00 | 46.44 | C |
| ATOM | 3546 | N | LYS | C | 168 | 72.407 | 110.976 | 52.001 | 1.00 | 66.98 | C |
| ATOM | 3547 | CA | LYS | C | 168 | 72.798 | 110.689 | 53.380 | 1.00 | 66.98 | C |
| ATOM | 3548 | CB | LYS | C | 168 | 74.184 | 110.041 | 53.412 | 1.00 | 99.56 | C |
| ATOM | 3549 | CG | LYS | C | 168 | 74.278 | 108.744 | 52.628 | 1.00 | 99.56 | C |
| ATOM | 3550 | CD | LYS | C | 168 | 75.692 | 108.186 | 52.634 | 1.00 | 99.56 | C |
| ATOM | 3551 | CE | LYS | C | 168 | 75.790 | 106.924 | 51.788 | 1.00 | 99.56 | C |
| ATOM | 3552 | NZ | LYS | C | 168 | 77.184 | 106.400 | 51.741 | 1.00 | 99.56 | C |
| ATOM | 3553 | C | LYS | C | 168 | 72.820 | 111.963 | 54.212 | 1.00 | 66.98 | C |
| ATOM | 3554 | O | LYS | C | 168 | 72.720 | 111.913 | 55.436 | 1.00 | 66.98 | C |
| ATOM | 3555 | N | ASP | C | 169 | 72.944 | 113.104 | 53.539 | 1.00 | 53.34 | C |
| ATOM | 3556 | CA | ASP | C | 169 | 72.982 | 114.393 | 54.214 | 1.00 | 53.34 | C |
| ATOM | 3557 | CB | ASP | C | 169 | 74.044 | 115.289 | 53.565 | 1.00 | 62.36 | C |
| ATOM | 3558 | CG | ASP | C | 169 | 73.620 | 115.806 | 52.203 | 1.00 | 62.36 | C |
| ATOM | 3559 | OD1 | ASP | C | 169 | 72.801 | 115.134 | 51.541 | 1.00 | 62.36 | C |
| ATOM | 3560 | OD2 | ASP | C | 169 | 74.112 | 116.879 | 51.787 | 1.00 | 62.36 | C |
| ATOM | 3561 | C | ASP | C | 169 | 71.622 | 115.097 | 54.199 | 1.00 | 53.34 | C |
| ATOM | 3562 | O | ASP | C | 169 | 71.495 | 116.221 | 54.684 | 1.00 | 53.34 | C |
| ATOM | 3563 | N | GLY | C | 170 | 70.609 | 114.447 | 53.635 | 1.00 | 56.33 | C |
| ATOM | 3564 | CA | GLY | C | 170 | 69.288 | 115.050 | 53.599 | 1.00 | 56.33 | C |
| ATOM | 3565 | C | GLY | C | 170 | 68.960 | 115.919 | 52.395 | 1.00 | 56.33 | C |
| ATOM | 3566 | O | GLY | C | 170 | 67.831 | 116.379 | 52.258 | 1.00 | 56.33 | C |
| ATOM | 3567 | N | THR | C | 171 | 69.930 | 116.159 | 51.523 | 1.00 | 45.41 | C |
| ATOM | 3568 | CA | THR | C | 171 | 69.685 | 116.967 | 50.334 | 1.00 | 45.41 | C |
| ATOM | 3569 | CB | THR | C | 171 | 70.984 | 117.567 | 49.769 | 1.00 | 41.09 | C |
| ATOM | 3570 | OG1 | THR | C | 171 | 71.881 | 116.505 | 49.411 | 1.00 | 41.09 | C |
| ATOM | 3571 | CG2 | THR | C | 171 | 71.639 | 118.476 | 50.792 | 1.00 | 41.09 | C |
| ATOM | 3572 | C | THR | C | 171 | 69.071 | 116.107 | 49.238 | 1.00 | 45.41 | C |
| ATOM | 3573 | O | THR | C | 171 | 69.305 | 114.895 | 49.179 | 1.00 | 45.41 | C |
| ATOM | 3574 | N | PRO | C | 172 | 68.260 | 116.719 | 48.364 | 1.00 | 46.08 | C |
| ATOM | 3575 | CD | PRO | C | 172 | 67.762 | 118.105 | 48.390 | 1.00 | 39.25 | C |
| ATOM | 3576 | CA | PRO | C | 172 | 67.636 | 115.965 | 47.277 | 1.00 | 46.08 | C |
| ATOM | 3577 | CB | PRO | C | 172 | 66.656 | 116.968 | 46.679 | 1.00 | 39.25 | C |
| ATOM | 3578 | CG | PRO | C | 172 | 67.302 | 118.290 | 46.970 | 1.00 | 39.25 | C |
| ATOM | 3579 | C | PRO | C | 172 | 68.665 | 115.485 | 46.261 | 1.00 | 46.08 | C |
| ATOM | 3580 | O | PRO | C | 172 | 69.519 | 116.255 | 45.820 | 1.00 | 46.08 | C |
| ATOM | 3581 | N | ARG | C | 173 | 68.574 | 114.206 | 45.903 | 1.00 | 42.90 | C |
| ATOM | 3582 | CA | ARG | C | 173 | 69.479 | 113.598 | 44.938 | 1.00 | 42.90 | C |
| ATOM | 3583 | CB | ARG | C | 173 | 69.773 | 112.149 | 45.334 | 1.00 | 59.68 | C |
| ATOM | 3584 | CG | ARG | C | 173 | 70.917 | 111.513 | 44.565 | 1.00 | 59.68 | C |
| ATOM | 3585 | CD | ARG | C | 173 | 71.158 | 110.080 | 45.016 | 1.00 | 59.68 | C |
| ATOM | 3586 | NE | ARG | C | 173 | 72.291 | 109.465 | 44.329 | 1.00 | 59.68 | C |
| ATOM | 3587 | CZ | ARG | C | 173 | 73.567 | 109.787 | 44.538 | 1.00 | 59.68 | C |
| ATOM | 3588 | NH1 | ARG | C | 173 | 73.889 | 110.721 | 45.424 | 1.00 | 59.68 | C |
| ATOM | 3589 | NH2 | ARG | C | 173 | 74.525 | 109.185 | 43.847 | 1.00 | 59.68 | C |
| ATOM | 3590 | C | ARG | C | 173 | 68.819 | 113.631 | 43.567 | 1.00 | 42.90 | C |
| ATOM | 3591 | O | ARG | C | 173 | 67.596 | 113.679 | 43.464 | 1.00 | 42.90 | C |
| ATOM | 3592 | N | GLU | C | 174 | 69.625 | 113.618 | 42.513 | 1.00 | 45.54 | C |
| ATOM | 3593 | CA | GLU | C | 174 | 69.081 | 113.628 | 41.164 | 1.00 | 45.54 | C |
| ATOM | 3594 | CB | GLU | C | 174 | 70.181 | 113.942 | 40.155 | 1.00 | 99.99 | C |
| ATOM | 3595 | CG | GLU | C | 174 | 70.694 | 115.359 | 40.240 | 1.00 | 99.99 | C |
| ATOM | 3596 | CD | GLU | C | 174 | 71.941 | 115.565 | 39.418 | 1.00 | 99.99 | C |
| ATOM | 3597 | OE1 | GLU | C | 174 | 72.997 | 115.018 | 39.802 | 1.00 | 99.99 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3598 | OE2 | GLU | C | 174 | 71.864 | 116.268 | 38.387 | 1.00 | 99.99 | C |
| ATOM | 3599 | C | GLU | C | 174 | 68.483 | 112.260 | 40.865 | 1.00 | 45.54 | C |
| ATOM | 3600 | O | GLU | C | 174 | 69.078 | 111.228 | 41.190 | 1.00 | 45.54 | C |
| ATOM | 3601 | N | GLY | C | 175 | 67.303 | 112.255 | 40.254 | 1.00 | 48.09 | C |
| ATOM | 3602 | CA | GLY | C | 175 | 66.652 | 111.002 | 39.923 | 1.00 | 48.09 | C |
| ATOM | 3603 | C | GLY | C | 175 | 67.429 | 110.165 | 38.923 | 1.00 | 48.09 | C |
| ATOM | 3604 | O | GLY | C | 175 | 67.243 | 108.950 | 38.850 | 1.00 | 48.09 | C |
| ATOM | 3605 | N | THR | C | 176 | 68.297 | 110.814 | 38.150 | 1.00 | 45.73 | C |
| ATOM | 3606 | CA | THR | C | 176 | 69.100 | 110.126 | 37.145 | 1.00 | 45.73 | C |
| ATOM | 3607 | CB | THR | C | 176 | 69.703 | 111.109 | 36.129 | 1.00 | 35.76 | C |
| ATOM | 3608 | OG1 | THR | C | 176 | 70.482 | 112.087 | 36.827 | 1.00 | 35.76 | C |
| ATOM | 3609 | CG2 | THR | C | 176 | 68.612 | 111.794 | 35.320 | 1.00 | 35.76 | C |
| ATOM | 3610 | C | THR | C | 176 | 70.254 | 109.350 | 37.772 | 1.00 | 45.73 | C |
| ATOM | 3611 | O | THR | C | 176 | 70.929 | 108.576 | 37.092 | 1.00 | 45.73 | C |
| ATOM | 3612 | N | ARG | C | 177 | 70.470 | 109.553 | 39.066 | 1.00 | 50.01 | C |
| ATOM | 3613 | CA | ARG | C | 177 | 71.549 | 108.880 | 39.776 | 1.00 | 50.01 | C |
| ATOM | 3614 | CB | ARG | C | 177 | 72.503 | 109.918 | 40.370 | 1.00 | 67.80 | C |
| ATOM | 3615 | CG | ARG | C | 177 | 73.068 | 110.895 | 39.349 | 1.00 | 67.80 | C |
| ATOM | 3616 | CD | ARG | C | 177 | 74.077 | 111.823 | 40.001 | 1.00 | 67.80 | C |
| ATOM | 3617 | NE | ARG | C | 177 | 75.105 | 111.060 | 40.700 | 1.00 | 67.80 | C |
| ATOM | 3618 | CZ | ARG | C | 177 | 75.975 | 111.580 | 41.559 | 1.00 | 67.80 | C |
| ATOM | 3619 | NH1 | ARG | C | 177 | 75.947 | 112.879 | 41.828 | 1.00 | 67.80 | C |
| ATOM | 3620 | NH2 | ARG | C | 177 | 76.862 | 110.795 | 42.161 | 1.00 | 67.80 | C |
| ATOM | 3621 | C | ARG | C | 177 | 70.995 | 107.995 | 40.886 | 1.00 | 50.01 | C |
| ATOM | 3622 | O | ARG | C | 177 | 71.487 | 108.016 | 42.016 | 1.00 | 50.01 | C |
| ATOM | 3623 | N | THR | C | 178 | 69.978 | 107.205 | 40.563 | 1.00 | 45.45 | C |
| ATOM | 3624 | CA | THR | C | 178 | 69.355 | 106.345 | 41.564 | 1.00 | 45.45 | C |
| ATOM | 3625 | CB | THR | C | 178 | 68.033 | 106.948 | 42.043 | 1.00 | 33.70 | C |
| ATOM | 3626 | OG1 | THR | C | 178 | 67.175 | 107.134 | 40.908 | 1.00 | 33.70 | C |
| ATOM | 3627 | CG2 | THR | C | 178 | 68.270 | 108.290 | 42.723 | 1.00 | 33.70 | C |
| ATOM | 3628 | C | THR | C | 178 | 69.046 | 104.949 | 41.057 | 1.00 | 45.45 | C |
| ATOM | 3629 | O | THR | C | 178 | 68.777 | 104.746 | 39.871 | 1.00 | 45.45 | C |
| ATOM | 3630 | N | LYS | C | 179 | 69.085 | 103.985 | 41.966 | 1.00 | 42.46 | C |
| ATOM | 3631 | CA | LYS | C | 179 | 68.768 | 102.607 | 41.629 | 1.00 | 42.46 | C |
| ATOM | 3632 | CB | LYS | C | 179 | 70.042 | 101.765 | 41.558 | 1.00 | 71.18 | C |
| ATOM | 3633 | CG | LYS | C | 179 | 70.915 | 102.133 | 40.373 | 1.00 | 71.18 | C |
| ATOM | 3634 | CD | LYS | C | 179 | 72.081 | 101.174 | 40.190 | 1.00 | 71.18 | C |
| ATOM | 3635 | CE | LYS | C | 179 | 72.936 | 101.569 | 38.981 | 1.00 | 71.18 | C |
| ATOM | 3636 | NZ | LYS | C | 179 | 74.059 | 100.617 | 38.729 | 1.00 | 71.18 | C |
| ATOM | 3637 | C | LYS | C | 179 | 67.798 | 102.072 | 42.684 | 1.00 | 42.46 | C |
| ATOM | 3638 | O | LYS | C | 179 | 68.010 | 102.235 | 43.893 | 1.00 | 42.46 | C |
| ATOM | 3639 | N | ARG | C | 180 | 66.724 | 101.450 | 42.211 | 1.00 | 51.30 | C |
| ATOM | 3640 | CA | ARG | C | 180 | 65.692 | 100.906 | 43.078 | 1.00 | 51.30 | C |
| ATOM | 3641 | CB | ARG | C | 180 | 64.901 | 99.817 | 42.345 | 1.00 | 47.59 | C |
| ATOM | 3642 | CG | ARG | C | 180 | 63.857 | 99.129 | 43.223 | 1.00 | 47.59 | C |
| ATOM | 3643 | CD | ARG | C | 180 | 63.351 | 97.875 | 42.573 | 1.00 | 47.59 | C |
| ATOM | 3644 | NE | ARG | C | 180 | 62.601 | 98.150 | 41.352 | 1.00 | 47.59 | C |
| ATOM | 3645 | CZ | ARG | C | 180 | 61.343 | 98.583 | 41.327 | 1.00 | 47.59 | C |
| ATOM | 3646 | NH1 | ARG | C | 180 | 60.691 | 98.793 | 42.466 | 1.00 | 47.59 | C |
| ATOM | 3647 | NH2 | ARG | C | 180 | 60.735 | 98.795 | 40.163 | 1.00 | 47.59 | C |
| ATOM | 3648 | C | ARG | C | 180 | 66.149 | 100.341 | 44.418 | 1.00 | 51.30 | C |
| ATOM | 3649 | O | ARG | C | 180 | 65.505 | 100.573 | 45.434 | 1.00 | 51.30 | C |
| ATOM | 3650 | N | HIS | C | 181 | 67.253 | 99.608 | 44.435 | 1.00 | 50.09 | C |
| ATOM | 3651 | CA | HIS | C | 181 | 67.705 | 98.996 | 45.680 | 1.00 | 50.09 | C |
| ATOM | 3652 | CB | HIS | C | 181 | 68.424 | 97.685 | 45.373 | 1.00 | 70.93 | C |
| ATOM | 3653 | CG | HIS | C | 181 | 67.570 | 96.701 | 44.637 | 1.00 | 70.93 | C |
| ATOM | 3654 | CD2 | HIS | C | 181 | 67.751 | 96.069 | 43.454 | 1.00 | 70.93 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 3655 | ND1 | HIS | C | 181 | 66.339 | 96.294 | 45.105 | 1.00 | 70.93 | C |
| ATOM | 3656 | CE1 | HIS | C | 181 | 65.798 | 95.454 | 44.241 | 1.00 | 70.93 | C |
| ATOM | 3657 | NE2 | HIS | C | 181 | 66.635 | 95.301 | 43.230 | 1.00 | 70.93 | C |
| ATOM | 3658 | C | HIS | C | 181 | 68.554 | 99.842 | 46.607 | 1.00 | 50.09 | C |
| ATOM | 3659 | O | HIS | C | 181 | 68.812 | 99.440 | 47.738 | 1.00 | 50.09 | C |
| ATOM | 3660 | N | GLN | C | 182 | 68.986 | 101.012 | 46.150 | 1.00 | 53.85 | C |
| ATOM | 3661 | CA | GLN | C | 182 | 69.802 | 101.881 | 46.996 | 1.00 | 53.85 | C |
| ATOM | 3662 | CB | GLN | C | 182 | 70.357 | 103.049 | 46.176 | 1.00 | 61.78 | C |
| ATOM | 3663 | CG | GLN | C | 182 | 71.310 | 102.612 | 45.078 | 1.00 | 61.78 | C |
| ATOM | 3664 | CD | GLN | C | 182 | 71.881 | 103.773 | 44.284 | 1.00 | 61.78 | C |
| ATOM | 3665 | OE1 | GLN | C | 182 | 71.174 | 104.429 | 43.514 | 1.00 | 61.78 | C |
| ATOM | 3666 | NE2 | GLN | C | 182 | 73.170 | 104.035 | 44.472 | 1.00 | 61.78 | C |
| ATOM | 3667 | C | GLN | C | 182 | 68.985 | 102.399 | 48.182 | 1.00 | 53.85 | C |
| ATOM | 3668 | O | GLN | C | 182 | 67.777 | 102.623 | 48.078 | 1.00 | 53.85 | C |
| ATOM | 3669 | N | LYS | C | 183 | 69.663 | 102.582 | 49.308 | 1.00 | 54.51 | C |
| ATOM | 3670 | CA | LYS | C | 183 | 69.047 | 103.051 | 50.548 | 1.00 | 54.51 | C |
| ATOM | 3671 | CB | LYS | C | 183 | 70.130 | 103.130 | 51.629 | 1.00 | 77.75 | C |
| ATOM | 3672 | CG | LYS | C | 183 | 69.647 | 103.424 | 53.033 | 1.00 | 77.75 | C |
| ATOM | 3673 | CD | LYS | C | 183 | 70.825 | 103.403 | 54.011 | 1.00 | 77.75 | C |
| ATOM | 3674 | CE | LYS | C | 183 | 70.393 | 103.704 | 55.443 | 1.00 | 77.75 | C |
| ATOM | 3675 | NZ | LYS | C | 183 | 71.526 | 103.617 | 56.411 | 1.00 | 77.75 | C |
| ATOM | 3676 | C | LYS | C | 183 | 68.307 | 104.392 | 50.442 | 1.00 | 54.51 | C |
| ATOM | 3677 | O | LYS | C | 183 | 67.215 | 104.542 | 50.988 | 1.00 | 54.51 | C |
| ATOM | 3678 | N | PHE | C | 184 | 68.878 | 105.357 | 49.725 | 1.00 | 47.10 | C |
| ATOM | 3679 | CA | PHE | C | 184 | 68.243 | 106.670 | 49.614 | 1.00 | 47.10 | C |
| ATOM | 3680 | CB | PHE | C | 184 | 69.262 | 107.727 | 49.168 | 1.00 | 60.40 | C |
| ATOM | 3681 | CG | PHE | C | 184 | 70.100 | 107.325 | 47.995 | 1.00 | 60.40 | C |
| ATOM | 3682 | CD1 | PHE | C | 184 | 69.526 | 106.748 | 46.867 | 1.00 | 60.40 | C |
| ATOM | 3683 | CD2 | PHE | C | 184 | 71.468 | 107.583 | 47.995 | 1.00 | 60.40 | C |
| ATOM | 3684 | CE1 | PHE | C | 184 | 70.302 | 106.433 | 45.747 | 1.00 | 60.40 | C |
| ATOM | 3685 | CE2 | PHE | C | 184 | 72.256 | 107.276 | 46.882 | 1.00 | 60.40 | C |
| ATOM | 3686 | CZ | PHE | C | 184 | 71.670 | 106.699 | 45.754 | 1.00 | 60.40 | C |
| ATOM | 3687 | C | PHE | C | 184 | 66.984 | 106.786 | 48.757 | 1.00 | 47.10 | C |
| ATOM | 3688 | O | PHE | C | 184 | 66.435 | 107.874 | 48.612 | 1.00 | 47.10 | C |
| ATOM | 3689 | N | THR | C | 185 | 66.528 | 105.670 | 48.196 | 1.00 | 41.07 | C |
| ATOM | 3690 | CA | THR | C | 185 | 65.325 | 105.655 | 47.367 | 1.00 | 41.07 | C |
| ATOM | 3691 | CB | THR | C | 185 | 65.539 | 104.852 | 46.066 | 1.00 | 41.06 | C |
| ATOM | 3692 | OG1 | THR | C | 185 | 65.820 | 103.485 | 46.390 | 1.00 | 41.06 | C |
| ATOM | 3693 | CG2 | THR | C | 185 | 66.692 | 105.431 | 45.254 | 1.00 | 41.06 | C |
| ATOM | 3694 | C | THR | C | 185 | 64.188 | 104.991 | 48.145 | 1.00 | 41.07 | C |
| ATOM | 3695 | O | THR | C | 185 | 63.075 | 104.837 | 47.639 | 1.00 | 41.07 | C |
| ATOM | 3696 | N | HIS | C | 186 | 64.476 | 104.595 | 49.381 | 1.00 | 41.75 | C |
| ATOM | 3697 | CA | HIS | C | 186 | 63.479 | 103.931 | 50.211 | 1.00 | 41.75 | C |
| ATOM | 3698 | CB | HIS | C | 186 | 64.139 | 102.810 | 51.018 | 1.00 | 62.27 | C |
| ATOM | 3699 | CG | HIS | C | 186 | 64.809 | 101.772 | 50.170 | 1.00 | 62.27 | C |
| ATOM | 3700 | CD2 | HIS | C | 186 | 64.964 | 101.681 | 48.827 | 1.00 | 62.27 | C |
| ATOM | 3701 | ND1 | HIS | C | 186 | 65.429 | 100.661 | 50.701 | 1.00 | 62.27 | C |
| ATOM | 3702 | CE1 | HIS | C | 186 | 65.936 | 99.932 | 49.723 | 1.00 | 62.27 | C |
| ATOM | 3703 | NE2 | HIS | C | 186 | 65.668 | 100.529 | 48.577 | 1.00 | 62.27 | C |
| ATOM | 3704 | C | HIS | C | 186 | 62.770 | 104.905 | 51.145 | 1.00 | 41.75 | C |
| ATOM | 3705 | O | HIS | C | 186 | 63.398 | 105.558 | 51.975 | 1.00 | 41.75 | C |
| ATOM | 3706 | N | PHE | C | 187 | 61.452 | 104.991 | 51.007 | 1.00 | 38.60 | C |
| ATOM | 3707 | CA | PHE | C | 187 | 60.670 | 105.898 | 51.831 | 1.00 | 38.60 | C |
| ATOM | 3708 | CB | PHE | C | 187 | 60.068 | 107.017 | 50.969 | 1.00 | 39.11 | C |
| ATOM | 3709 | CG | PHE | C | 187 | 61.084 | 108.010 | 50.464 | 1.00 | 39.11 | C |
| ATOM | 3710 | CD1 | PHE | C | 187 | 61.869 | 107.723 | 49.348 | 1.00 | 39.11 | C |
| ATOM | 3711 | CD2 | PHE | C | 187 | 61.269 | 109.224 | 51.117 | 1.00 | 39.11 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 3712 | CE1 | PHE | C | 187 | 62.824 | 108.630 | 48.887 | 1.00 | 39.11 | C |
| ATOM | 3713 | CE2 | PHE | C | 187 | 62.226 | 110.142 | 50.661 | 1.00 | 39.11 | C |
| ATOM | 3714 | CZ | PHE | C | 187 | 63.004 | 109.839 | 49.542 | 1.00 | 39.11 | C |
| ATOM | 3715 | C | PHE | C | 187 | 59.565 | 105.182 | 52.587 | 1.00 | 38.60 | C |
| ATOM | 3716 | O | PHE | C | 187 | 58.882 | 104.318 | 52.044 | 1.00 | 38.60 | C |
| ATOM | 3717 | N | LEU | C | 188 | 59.390 | 105.555 | 53.848 | 1.00 | 47.29 | C |
| ATOM | 3718 | CA | LEU | C | 188 | 58.368 | 104.948 | 54.684 | 1.00 | 47.29 | C |
| ATOM | 3719 | CB | LEU | C | 188 | 58.979 | 104.517 | 56.020 | 1.00 | 52.27 | C |
| ATOM | 3720 | CG | LEU | C | 188 | 58.046 | 103.951 | 57.094 | 1.00 | 52.27 | C |
| ATOM | 3721 | CD1 | LEU | C | 188 | 57.445 | 102.640 | 56.629 | 1.00 | 52.27 | C |
| ATOM | 3722 | CD2 | LEU | C | 188 | 58.831 | 103.741 | 58.378 | 1.00 | 52.27 | C |
| ATOM | 3723 | C | LEU | C | 188 | 57.216 | 105.915 | 54.936 | 1.00 | 47.29 | C |
| ATOM | 3724 | O | LEU | C | 188 | 57.392 | 106.966 | 55.557 | 1.00 | 47.29 | C |
| ATOM | 3725 | N | PRO | C | 189 | 56.023 | 105.591 | 54.422 | 1.00 | 47.58 | C |
| ATOM | 3726 | CD | PRO | C | 189 | 55.626 | 104.545 | 53.464 | 1.00 | 37.11 | C |
| ATOM | 3727 | CA | PRO | C | 189 | 54.922 | 106.515 | 54.676 | 1.00 | 47.58 | C |
| ATOM | 3728 | CB | PRO | C | 189 | 53.779 | 105.936 | 53.838 | 1.00 | 37.11 | C |
| ATOM | 3729 | CG | PRO | C | 189 | 54.486 | 105.213 | 52.731 | 1.00 | 37.11 | C |
| ATOM | 3730 | C | PRO | C | 189 | 54.644 | 106.436 | 56.173 | 1.00 | 47.58 | C |
| ATOM | 3731 | O | PRO | C | 189 | 54.253 | 105.391 | 56.683 | 1.00 | 47.58 | C |
| ATOM | 3732 | N | ARG | C | 190 | 54.888 | 107.528 | 56.878 | 1.00 | 53.62 | C |
| ATOM | 3733 | CA | ARG | C | 190 | 54.655 | 107.565 | 58.308 | 1.00 | 53.62 | C |
| ATOM | 3734 | CB | ARG | C | 190 | 55.822 | 108.261 | 59.017 | 1.00 | 57.94 | C |
| ATOM | 3735 | CG | ARG | C | 190 | 56.972 | 107.325 | 59.374 | 1.00 | 57.94 | C |
| ATOM | 3736 | CD | ARG | C | 190 | 58.217 | 108.077 | 59.830 | 1.00 | 57.94 | C |
| ATOM | 3737 | NE | ARG | C | 190 | 57.946 | 109.118 | 60.827 | 1.00 | 57.94 | C |
| ATOM | 3738 | CZ | ARG | C | 190 | 57.447 | 108.892 | 62.038 | 1.00 | 57.94 | C |
| ATOM | 3739 | NH1 | ARG | C | 190 | 57.159 | 107.652 | 62.416 | 1.00 | 57.94 | C |
| ATOM | 3740 | NH2 | ARG | C | 190 | 57.243 | 109.900 | 62.871 | 1.00 | 57.94 | C |
| ATOM | 3741 | C | ARG | C | 190 | 53.355 | 108.300 | 58.578 | 1.00 | 53.62 | C |
| ATOM | 3742 | O | ARG | C | 190 | 52.907 | 109.107 | 57.762 | 1.00 | 53.62 | C |
| ATOM | 3743 | N | PRO | C | 191 | 52.714 | 108.010 | 59.722 | 1.00 | 60.11 | C |
| ATOM | 3744 | CD | PRO | C | 191 | 53.045 | 106.930 | 60.669 | 1.00 | 55.97 | C |
| ATOM | 3745 | CA | PRO | C | 191 | 51.453 | 108.655 | 60.097 | 1.00 | 60.11 | C |
| ATOM | 3746 | CB | PRO | C | 191 | 50.887 | 107.701 | 61.138 | 1.00 | 55.97 | C |
| ATOM | 3747 | CG | PRO | C | 191 | 52.113 | 107.224 | 61.827 | 1.00 | 55.97 | C |
| ATOM | 3748 | C | PRO | C | 191 | 51.656 | 110.064 | 60.651 | 1.00 | 60.11 | C |
| ATOM | 3749 | O | PRO | C | 191 | 52.767 | 110.463 | 61.008 | 1.00 | 60.11 | C |
| ATOM | 3750 | N | VAL | C | 192 | 50.570 | 110.818 | 60.719 | 1.00 | 54.92 | C |
| ATOM | 3751 | CA | VAL | C | 192 | 50.637 | 112.177 | 61.231 | 1.00 | 54.92 | C |
| ATOM | 3752 | CB | VAL | C | 192 | 50.114 | 113.183 | 60.188 | 1.00 | 49.31 | C |
| ATOM | 3753 | CG1 | VAL | C | 192 | 50.034 | 114.575 | 60.798 | 1.00 | 49.31 | C |
| ATOM | 3754 | CG2 | VAL | C | 192 | 51.034 | 113.187 | 58.968 | 1.00 | 49.31 | C |
| ATOM | 3755 | C | VAL | C | 192 | 49.836 | 112.340 | 62.518 | 1.00 | 54.92 | C |
| ATOM | 3756 | O | VAL | C | 192 | 48.669 | 111.954 | 62.597 | 1.00 | 54.92 | C |
| ATOM | 3757 | N | ASP | C | 193 | 50.483 | 112.910 | 63.526 | 1.00 | 56.92 | C |
| ATOM | 3758 | CA | ASP | C | 193 | 49.851 | 113.159 | 64.814 | 1.00 | 56.92 | C |
| ATOM | 3759 | CB | ASP | C | 193 | 50.924 | 113.391 | 65.879 | 1.00 | 65.93 | C |
| ATOM | 3760 | CG | ASP | C | 193 | 50.371 | 113.347 | 67.289 | 1.00 | 65.93 | C |
| ATOM | 3761 | OD1 | ASP | C | 193 | 49.235 | 113.825 | 67.512 | 1.00 | 65.93 | C |
| ATOM | 3762 | OD2 | ASP | C | 193 | 51.089 | 112.840 | 68.179 | 1.00 | 65.93 | C |
| ATOM | 3763 | C | ASP | C | 193 | 49.004 | 114.424 | 64.661 | 1.00 | 56.92 | C |
| ATOM | 3764 | O | ASP | C | 193 | 49.523 | 115.485 | 64.298 | 1.00 | 56.92 | C |
| ATOM | 3765 | N | PRO | C | 194 | 47.694 | 114.329 | 64.937 | 1.00 | 79.75 | C |
| ATOM | 3766 | CD | PRO | C | 194 | 46.978 | 113.108 | 65.345 | 1.00 | 100.00 | C |
| ATOM | 3767 | CA | PRO | C | 194 | 46.765 | 115.460 | 64.831 | 1.00 | 79.75 | C |
| ATOM | 3768 | CB | PRO | C | 194 | 45.446 | 114.868 | 65.323 | 1.00 | 100.00 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 3769 | CG | PRO | C | 194 | 45.560 | 113.429 | 64.953 | 1.00 | 100.00 | C |
| ATOM | 3770 | C | PRO | C | 194 | 47.184 | 116.672 | 65.664 | 1.00 | 79.75 | C |
| ATOM | 3771 | O | PRO | C | 194 | 47.107 | 117.817 | 65.210 | 1.00 | 79.75 | C |
| ATOM | 3772 | N | ASP | C | 195 | 47.635 | 116.405 | 66.884 | 1.00 | 70.88 | C |
| ATOM | 3773 | CA | ASP | C | 195 | 48.043 | 117.453 | 67.808 | 1.00 | 70.88 | C |
| ATOM | 3774 | CB | ASP | C | 195 | 48.136 | 116.877 | 69.220 | 1.00 | 92.45 | C |
| ATOM | 3775 | CG | ASP | C | 195 | 48.861 | 116.173 | 69.644 | 1.00 | 92.45 | C |
| ATOM | 3776 | OD1 | ASP | C | 195 | 45.794 | 116.826 | 69.634 | 1.00 | 92.45 | C |
| ATOM | 3777 | OD2 | ASP | C | 195 | 46.927 | 114.970 | 69.983 | 1.00 | 92.45 | C |
| ATOM | 3778 | C | ASP | C | 195 | 49.357 | 118.131 | 67.445 | 1.00 | 70.88 | C |
| ATOM | 3779 | O | ASP | C | 195 | 49.591 | 119.280 | 67.825 | 1.00 | 70.88 | C |
| ATOM | 3780 | N | LYS | C | 196 | 50.218 | 117.428 | 66.717 | 1.00 | 79.05 | C |
| ATOM | 3781 | CA | LYS | C | 196 | 51.504 | 117.996 | 66.328 | 1.00 | 79.05 | C |
| ATOM | 3782 | CB | LYS | C | 196 | 52.490 | 116.884 | 65.964 | 1.00 | 74.82 | C |
| ATOM | 3783 | CG | LYS | C | 196 | 52.750 | 115.883 | 67.072 | 1.00 | 74.82 | C |
| ATOM | 3784 | CD | LYS | C | 196 | 53.272 | 116.553 | 68.322 | 1.00 | 74.82 | C |
| ATOM | 3785 | CE | LYS | C | 196 | 53.425 | 115.545 | 69.454 | 1.00 | 74.82 | C |
| ATOM | 3786 | NZ | LYS | C | 196 | 53.707 | 116.210 | 70.766 | 1.00 | 74.82 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 3787 | C | LYS | C | 196 | 51.356 | 118.957 | 65.150 | 1.00 | 79.05 | C |
| ATOM | 3788 | O | LYS | C | 196 | 52.226 | 119.801 | 64.918 | 1.00 | 79.05 | C |
| ATOM | 3789 | N | VAL | C | 197 | 50.250 | 118.829 | 64.417 | 1.00 | 61.75 | C |
| ATOM | 3790 | CA | VAL | C | 197 | 49.973 | 119.677 | 63.256 | 1.00 | 61.75 | C |
| ATOM | 3791 | CB | VAL | C | 197 | 49.442 | 118.832 | 62.083 | 1.00 | 88.39 | C |
| ATOM | 3792 | CG1 | VAL | C | 197 | 49.254 | 119.704 | 60.855 | 1.00 | 88.39 | C |
| ATOM | 3793 | CG2 | VAL | C | 197 | 50.391 | 117.695 | 61.797 | 1.00 | 88.39 | C |
| ATOM | 3794 | C | VAL | C | 197 | 48.924 | 120.748 | 63.585 | 1.00 | 61.75 | C |
| ATOM | 3795 | O | VAL | C | 197 | 47.724 | 120.493 | 63.493 | 1.00 | 61.75 | C |
| ATOM | 3796 | N | PRO | C | 198 | 49.362 | 121.960 | 63.967 | 1.00 | 68.67 | C |
| ATOM | 3797 | CD | PRO | C | 198 | 50.758 | 122.357 | 64.217 | 1.00 | 60.06 | C |
| ATOM | 3798 | CA | PRO | C | 198 | 48.449 | 123.058 | 64.310 | 1.00 | 68.67 | C |
| ATOM | 3799 | CB | PRO | C | 198 | 49.399 | 124.212 | 64.603 | 1.00 | 60.06 | C |
| ATOM | 3800 | CG | PRO | C | 198 | 50.591 | 123.513 | 65.172 | 1.00 | 60.06 | C |
| ATOM | 3801 | C | PRO | C | 198 | 47.436 | 123.410 | 63.225 | 1.00 | 68.67 | C |
| ATOM | 3802 | O | PRO | C | 198 | 46.257 | 123.607 | 63.506 | 1.00 | 68.67 | C |
| ATOM | 3803 | N | GLU | C | 199 | 47.899 | 123.484 | 61.985 | 1.00 | 73.27 | C |
| ATOM | 3804 | CA | GLU | C | 199 | 47.040 | 123.826 | 60.857 | 1.00 | 73.27 | C |
| ATOM | 3805 | CB | GLU | C | 199 | 47.890 | 123.905 | 59.593 | 1.00 | 100.00 | C |
| ATOM | 3806 | CG | GLU | C | 199 | 49.179 | 124.679 | 59.789 | 1.00 | 100.00 | C |
| ATOM | 3807 | CD | GLU | C | 199 | 48.940 | 126.062 | 60.360 | 1.00 | 100.00 | C |
| ATOM | 3808 | OE1 | GLU | C | 199 | 48.209 | 126.851 | 59.721 | 1.00 | 100.00 | C |
| ATOM | 3809 | OE2 | GLU | C | 199 | 49.483 | 126.358 | 61.447 | 1.00 | 100.00 | C |
| ATOM | 3810 | C | GLU | C | 199 | 45.874 | 122.859 | 60.624 | 1.00 | 73.27 | C |
| ATOM | 3811 | O | GLU | C | 199 | 44.870 | 123.221 | 60.014 | 1.00 | 73.27 | C |
| ATOM | 3812 | N | LEU | C | 200 | 46.003 | 121.633 | 61.114 | 1.00 | 90.93 | C |
| ATOM | 3813 | CA | LEU | C | 200 | 44.967 | 120.623 | 60.918 | 1.00 | 90.93 | C |
| ATOM | 3814 | CB | LEU | C | 200 | 45.221 | 119.409 | 61.817 | 1.00 | 63.86 | C |
| ATOM | 3815 | CG | LEU | C | 200 | 44.269 | 118.230 | 61.589 | 1.00 | 63.86 | C |
| ATOM | 3816 | CD1 | LEU | C | 200 | 44.364 | 117.755 | 60.142 | 1.00 | 63.86 | C |
| ATOM | 3817 | CD2 | LEU | C | 200 | 44.621 | 117.101 | 62.550 | 1.00 | 63.86 | C |
| ATOM | 3818 | C | LEU | C | 200 | 43.529 | 121.093 | 61.117 | 1.00 | 90.93 | C |
| ATOM | 3819 | O | LEU | C | 200 | 42.614 | 120.543 | 60.511 | 1.00 | 90.93 | C |
| ATOM | 3820 | N | TYR | C | 201 | 43.308 | 122.098 | 61.954 | 1.00 | 78.12 | C |
| ATOM | 3821 | CA | TYR | C | 201 | 41.939 | 122.541 | 62.155 | 1.00 | 78.12 | C |
| ATOM | 3822 | CB | TYR | C | 201 | 41.784 | 123.185 | 63.559 | 1.00 | 76.20 | C |
| ATOM | 3823 | CG | TYR | C | 201 | 41.961 | 124.683 | 63.682 | 1.00 | 76.20 | C |
| ATOM | 3824 | CD1 | TYR | C | 201 | 40.894 | 125.550 | 63.453 | 1.00 | 76.20 | C |
| ATOM | 3825 | CE1 | TYR | C | 201 | 41.042 | 126.927 | 63.581 | 1.00 | 76.20 | C |
| ATOM | 3826 | CD2 | TYR | C | 201 | 43.187 | 125.235 | 64.044 | 1.00 | 76.20 | C |
| ATOM | 3827 | CE2 | TYR | C | 201 | 43.347 | 126.615 | 64.173 | 1.00 | 76.20 | C |
| ATOM | 3828 | CZ | TYR | C | 201 | 42.269 | 127.456 | 63.940 | 1.00 | 76.20 | C |
| ATOM | 3829 | OH | TYR | C | 201 | 42.404 | 128.825 | 64.061 | 1.00 | 76.20 | C |
| ATOM | 3830 | C | TYR | C | 201 | 41.461 | 123.425 | 60.988 | 1.00 | 78.12 | C |
| ATOM | 3831 | O | TYR | C | 201 | 41.658 | 124.641 | 60.935 | 1.00 | 78.12 | C |
| ATOM | 3832 | N | LYS | C | 202 | 40.879 | 122.738 | 60.012 | 1.00 | 100.00 | C |
| ATOM | 3833 | CA | LYS | C | 202 | 40.330 | 123.334 | 58.801 | 1.00 | 100.00 | C |
| ATOM | 3834 | CB | LYS | C | 202 | 41.296 | 123.177 | 57.628 | 1.00 | 86.46 | C |
| ATOM | 3835 | CG | LYS | C | 202 | 41.577 | 121.728 | 57.235 | 1.00 | 86.46 | C |
| ATOM | 3836 | CD | LYS | C | 202 | 42.359 | 121.645 | 55.927 | 1.00 | 86.46 | C |
| ATOM | 3837 | CE | LYS | C | 202 | 43.677 | 122.416 | 55.990 | 1.00 | 86.46 | C |
| ATOM | 3838 | NZ | LYS | C | 202 | 44.631 | 121.864 | 56.998 | 1.00 | 86.46 | C |
| ATOM | 3839 | C | LYS | C | 202 | 39.084 | 122.503 | 58.549 | 1.00 | 100.00 | C |
| ATOM | 3840 | O | LYS | C | 202 | 38.406 | 122.641 | 57.532 | 1.00 | 100.00 | C |
| ATOM | 3841 | N | ASP | C | 203 | 38.817 | 121.616 | 59.500 | 1.00 | 97.06 | C |
| ATOM | 3842 | CA | ASP | C | 203 | 37.659 | 120.741 | 59.465 | 1.00 | 97.06 | C |
| ATOM | 3843 | CB | ASP | C | 203 | 38.054 | 119.328 | 59.878 | 1.00 | 99.98 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|---------|------|--------|---|
| ATOM | 3844 | CG | ASP | C | 203 | 38.808 | 119.300 | 61.187 | 1.00 | 99.98 | C |
| ATOM | 3845 | OD1 | ASP | C | 203 | 39.982 | 119.731 | 61.211 | 1.00 | 99.98 | C |
| ATOM | 3846 | OD2 | ASP | C | 203 | 38.221 | 118.857 | 62.193 | 1.00 | 99.98 | C |
| ATOM | 3847 | C | ASP | C | 203 | 36.627 | 121.297 | 60.441 | 1.00 | 97.06 | C |
| ATOM | 3848 | O | ASP | C | 203 | 35.569 | 120.701 | 60.654 | 1.00 | 97.06 | C |
| ATOM | 3849 | N | ILE | C | 204 | 36.952 | 122.438 | 61.046 | 1.00 | 67.87 | C |
| ATOM | 3850 | CA | ILE | C | 204 | 36.032 | 123.085 | 61.972 | 1.00 | 67.87 | C |
| ATOM | 3851 | CB | ILE | C | 204 | 36.773 | 123.813 | 63.114 | 1.00 | 79.05 | C |
| ATOM | 3852 | CG2 | ILE | C | 204 | 35.774 | 124.321 | 64.126 | 1.00 | 79.05 | C |
| ATOM | 3853 | CG1 | ILE | C | 204 | 37.704 | 122.852 | 63.848 | 1.00 | 79.05 | C |
| ATOM | 3854 | CD1 | ILE | C | 204 | 38.327 | 123.463 | 65.077 | 1.00 | 79.05 | C |
| ATOM | 3855 | C | ILE | C | 204 | 35.177 | 124.096 | 61.196 | 1.00 | 67.87 | C |
| ATOM | 3856 | O | ILE | C | 204 | 35.659 | 124.752 | 60.274 | 1.00 | 67.87 | C |
| ATOM | 3857 | N | LEU | C | 205 | 33.911 | 124.208 | 61.589 | 1.00 | 95.77 | C |
| ATOM | 3858 | CA | LEU | C | 205 | 32.932 | 125.092 | 60.951 | 1.00 | 95.77 | C |
| ATOM | 3859 | CB | LEU | C | 205 | 31.664 | 125.151 | 61.819 | 1.00 | 100.00 | C |
| ATOM | 3860 | CG | LEU | C | 205 | 31.021 | 123.821 | 62.249 | 1.00 | 100.00 | C |
| ATOM | 3861 | CD1 | LEU | C | 205 | 29.889 | 124.093 | 63.234 | 1.00 | 100.00 | C |
| ATOM | 3862 | CD2 | LEU | C | 205 | 30.504 | 123.064 | 61.026 | 1.00 | 100.00 | C |
| ATOM | 3863 | C | LEU | C | 205 | 33.366 | 126.522 | 60.601 | 1.00 | 95.77 | C |
| ATOM | 3864 | O | LEU | C | 205 | 32.652 | 127.219 | 59.882 | 1.00 | 95.77 | C |
| ATOM | 3865 | N | SER | C | 206 | 34.516 | 126.963 | 61.107 | 1.00 | 75.84 | C |
| ATOM | 3866 | CA | SER | C | 206 | 35.027 | 128.317 | 60.840 | 1.00 | 75.84 | C |
| ATOM | 3867 | CB | SER | C | 206 | 35.253 | 128.534 | 59.342 | 1.00 | 58.82 | C |
| ATOM | 3868 | OG | SER | C | 206 | 35.564 | 129.900 | 59.083 | 1.00 | 58.82 | C |
| ATOM | 3869 | C | SER | C | 206 | 34.177 | 129.482 | 61.354 | 1.00 | 75.84 | C |
| ATOM | 3870 | O | SER | C | 206 | 32.952 | 129.526 | 61.076 | 1.00 | 75.84 | C |
| ATOM | 3871 | OXT | SER | C | 206 | 34.777 | 130.366 | 62.007 | 1.00 | 52.10 | C |
| ATOM | 3872 | CB | PRO | D | 49 | 66.824 | 78.431 | -12.855 | 1.00 | 84.09 | D |
| ATOM | 3873 | CG | PRO | D | 49 | 65.930 | 77.235 | -12.554 | 1.00 | 84.09 | D |
| ATOM | 3874 | C | PRO | D | 49 | 67.642 | 79.232 | -10.616 | 1.00 | 84.09 | D |
| ATOM | 3875 | O | PRO | D | 49 | 68.213 | 80.320 | -10.542 | 1.00 | 84.09 | D |
| ATOM | 3876 | N | PRO | D | 49 | 67.924 | 76.869 | -11.366 | 1.00 | 84.09 | D |
| ATOM | 3877 | CD | PRO | D | 49 | 66.891 | 76.118 | -12.101 | 1.00 | 84.09 | D |
| ATOM | 3878 | CA | PRO | D | 49 | 67.905 | 78.289 | -11.787 | 1.00 | 84.09 | D |
| ATOM | 3879 | N | ALA | D | 50 | 66.771 | 78.819 | -9.704 | 1.00 | 75.27 | D |
| ATOM | 3880 | CA | ALA | D | 50 | 66.463 | 79.643 | -8.546 | 1.00 | 75.27 | D |
| ATOM | 3881 | CB | ALA | D | 50 | 65.119 | 79.243 | -7.964 | 1.00 | 100.00 | D |
| ATOM | 3882 | C | ALA | D | 50 | 67.571 | 79.446 | -7.515 | 1.00 | 75.27 | D |
| ATOM | 3883 | O | ALA | D | 50 | 68.080 | 80.413 | -6.941 | 1.00 | 75.27 | D |
| ATOM | 3884 | N | VAL | D | 51 | 67.944 | 78.187 | -7.290 | 1.00 | 72.18 | D |
| ATOM | 3885 | CA | VAL | D | 51 | 68.996 | 77.858 | -6.337 | 1.00 | 72.18 | D |
| ATOM | 3886 | CB | VAL | D | 51 | 69.176 | 76.325 | -6.184 | 1.00 | 58.48 | D |
| ATOM | 3887 | CG1 | VAL | D | 51 | 70.457 | 76.024 | -5.407 | 1.00 | 58.48 | D |
| ATOM | 3888 | CG2 | VAL | D | 51 | 67.987 | 75.729 | -5.451 | 1.00 | 58.48 | D |
| ATOM | 3889 | C | VAL | D | 51 | 70.321 | 78.450 | -6.789 | 1.00 | 72.18 | D |
| ATOM | 3890 | O | VAL | D | 51 | 71.118 | 78.900 | -5.965 | 1.00 | 72.18 | D |
| ATOM | 3891 | N | THR | D | 52 | 70.548 | 78.449 | -8.100 | 1.00 | 62.28 | D |
| ATOM | 3892 | CA | THR | D | 52 | 71.785 | 78.976 | -8.666 | 1.00 | 62.28 | D |
| ATOM | 3893 | CB | THR | D | 52 | 71.877 | 78.690 | -10.188 | 1.00 | 100.00 | D |
| ATOM | 3894 | OG1 | THR | D | 52 | 73.163 | 79.091 | -10.675 | 1.00 | 100.00 | D |
| ATOM | 3895 | CG2 | THR | D | 52 | 70.811 | 79.452 | -10.947 | 1.00 | 100.00 | D |
| ATOM | 3896 | C | THR | D | 52 | 71.911 | 80.478 | -8.420 | 1.00 | 62.28 | D |
| ATOM | 3897 | O | THR | D | 52 | 72.986 | 80.972 | -8.088 | 1.00 | 62.28 | D |
| ATOM | 3898 | N | ASP | D | 53 | 70.811 | 81.203 | -8.583 | 1.00 | 58.35 | D |
| ATOM | 3899 | CA | ASP | D | 53 | 70.831 | 82.634 | -8.348 | 1.00 | 58.35 | D |
| ATOM | 3900 | CB | ASP | D | 53 | 69.556 | 83.277 | -8.886 | 1.00 | 100.00 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|--------|---------|------|--------|---|
| ATOM | 3901 | CG | ASP | D | 53 | 69.555 | 83.376 | -10.397 | 1.00 | 100.00 | D |
| ATOM | 3902 | OD1 | ASP | D | 53 | 69.761 | 82.339 | -11.062 | 1.00 | 100.00 | D |
| ATOM | 3903 | OD2 | ASP | D | 53 | 69.350 | 84.492 | -10.918 | 1.00 | 100.00 | D |
| ATOM | 3904 | C | ASP | D | 53 | 70.980 | 82.902 | -6.853 | 1.00 | 58.35 | D |
| ATOM | 3905 | O | ASP | D | 53 | 71.590 | 83.892 | -6.446 | 1.00 | 58.35 | D |
| ATOM | 3906 | N | LEU | D | 54 | 70.434 | 82.007 | -6.036 | 1.00 | 51.66 | D |
| ATOM | 3907 | CA | LEU | D | 54 | 70.534 | 82.152 | -4.595 | 1.00 | 51.66 | D |
| ATOM | 3908 | CB | LEU | D | 54 | 69.611 | 81.159 | -3.896 | 1.00 | 43.71 | D |
| ATOM | 3909 | CG | LEU | D | 54 | 69.558 | 81.287 | -2.371 | 1.00 | 43.71 | D |
| ATOM | 3910 | CD1 | LEU | D | 54 | 69.054 | 82.685 | -2.001 | 1.00 | 43.71 | D |
| ATOM | 3911 | CD2 | LEU | D | 54 | 68.656 | 80.205 | -1.787 | 1.00 | 43.71 | D |
| ATOM | 3912 | C | LEU | D | 54 | 71.977 | 81.917 | -4.165 | 1.00 | 51.66 | D |
| ATOM | 3913 | O | LEU | D | 54 | 72.528 | 82.677 | -3.370 | 1.00 | 51.66 | D |
| ATOM | 3914 | N | ASP | D | 55 | 72.601 | 80.872 | -4.693 | 1.00 | 58.79 | D |
| ATOM | 3915 | CA | ASP | D | 55 | 73.982 | 80.600 | -4.329 | 1.00 | 58.79 | D |
| ATOM | 3916 | CB | ASP | D | 55 | 74.441 | 79.251 | -4.874 | 1.00 | 70.83 | D |
| ATOM | 3917 | CG | ASP | D | 55 | 73.811 | 78.096 | -4.137 | 1.00 | 70.83 | D |
| ATOM | 3918 | OD1 | ASP | D | 55 | 73.639 | 78.211 | -2.903 | 1.00 | 70.83 | D |
| ATOM | 3919 | OD2 | ASP | D | 55 | 73.497 | 77.074 | -4.784 | 1.00 | 70.83 | D |
| ATOM | 3920 | C | ASP | D | 55 | 74.891 | 81.698 | -4.835 | 1.00 | 58.79 | D |
| ATOM | 3921 | O | ASP | D | 55 | 75.857 | 82.060 | -4.170 | 1.00 | 58.79 | D |
| ATOM | 3922 | N | HIS | D | 56 | 74.582 | 82.232 | -6.010 | 1.00 | 59.43 | D |
| ATOM | 3923 | CA | HIS | D | 56 | 75.383 | 83.311 | -6.570 | 1.00 | 59.43 | D |
| ATOM | 3924 | CB | HIS | D | 56 | 74.833 | 83.731 | -7.936 | 1.00 | 91.91 | D |
| ATOM | 3925 | CG | HIS | D | 56 | 75.533 | 84.914 | -8.532 | 1.00 | 91.91 | D |
| ATOM | 3926 | CD2 | HIS | D | 56 | 75.068 | 86.132 | -8.902 | 1.00 | 91.91 | D |
| ATOM | 3927 | ND1 | HIS | D | 56 | 76.884 | 84.921 | -8.805 | 1.00 | 91.91 | D |
| ATOM | 3928 | CE1 | HIS | D | 56 | 77.222 | 86.092 | -9.318 | 1.00 | 91.91 | D |
| ATOM | 3929 | NE2 | HIS | D | 56 | 76.139 | 86.845 | -9.388 | 1.00 | 91.91 | D |
| ATOM | 3930 | C | HIS | D | 56 | 75.323 | 84.492 | -5.603 | 1.00 | 59.43 | D |
| ATOM | 3931 | O | HIS | D | 56 | 76.330 | 85.145 | -5.318 | 1.00 | 59.43 | D |
| ATOM | 3932 | N | LEU | D | 57 | 74.130 | 84.744 | -5.081 | 1.00 | 47.08 | D |
| ATOM | 3933 | CA | LEU | D | 57 | 73.933 | 85.845 | -4.161 | 1.00 | 47.08 | D |
| ATOM | 3934 | CB | LEU | D | 57 | 72.434 | 86.065 | -3.938 | 1.00 | 61.70 | D |
| ATOM | 3935 | CG | LEU | D | 57 | 72.000 | 87.364 | -3.261 | 1.00 | 61.70 | D |
| ATOM | 3936 | CD1 | LEU | D | 57 | 72.801 | 88.541 | -3.788 | 1.00 | 61.70 | D |
| ATOM | 3937 | CD2 | LEU | D | 57 | 70.525 | 87.567 | -3.517 | 1.00 | 61.70 | D |
| ATOM | 3938 | C | LEU | D | 57 | 74.652 | 85.593 | -2.838 | 1.00 | 47.08 | D |
| ATOM | 3939 | O | LEU | D | 57 | 75.218 | 86.518 | -2.247 | 1.00 | 47.08 | D |
| ATOM | 3940 | N | LYS | D | 58 | 74.643 | 84.341 | -2.382 | 1.00 | 31.13 | D |
| ATOM | 3941 | CA | LYS | D | 58 | 75.309 | 83.998 | -1.134 | 1.00 | 31.13 | D |
| ATOM | 3942 | CB | LYS | D | 58 | 75.046 | 82.538 | -0.777 | 1.00 | 35.52 | D |
| ATOM | 3943 | CG | LYS | D | 58 | 73.614 | 82.288 | -0.322 | 1.00 | 35.52 | D |
| ATOM | 3944 | CD | LYS | D | 58 | 73.443 | 80.883 | 0.205 | 1.00 | 35.52 | D |
| ATOM | 3945 | CE | LYS | D | 58 | 72.066 | 80.705 | 0.788 | 1.00 | 35.52 | D |
| ATOM | 3946 | NZ | LYS | D | 58 | 71.923 | 79.393 | 1.458 | 1.00 | 35.52 | D |
| ATOM | 3947 | C | LYS | D | 58 | 76.808 | 84.263 | -1.238 | 1.00 | 31.13 | D |
| ATOM | 3948 | O | LYS | D | 58 | 77.445 | 84.706 | -0.265 | 1.00 | 31.13 | D |
| ATOM | 3949 | N | GLY | D | 59 | 77.354 | 84.004 | -2.430 | 1.00 | 38.25 | D |
| ATOM | 3950 | CA | GLY | D | 59 | 78.765 | 84.225 | -2.684 | 1.00 | 38.25 | D |
| ATOM | 3951 | C | GLY | D | 59 | 79.093 | 85.704 | -2.610 | 1.00 | 38.25 | D |
| ATOM | 3952 | O | GLY | D | 59 | 80.106 | 86.087 | -2.018 | 1.00 | 38.25 | D |
| ATOM | 3953 | N | ILE | D | 60 | 78.243 | 86.534 | -3.218 | 1.00 | 35.08 | D |
| ATOM | 3954 | CA | ILE | D | 60 | 78.433 | 87.987 | -3.182 | 1.00 | 35.08 | D |
| ATOM | 3955 | CB | ILE | D | 60 | 77.232 | 88.763 | -3.806 | 1.00 | 40.77 | D |
| ATOM | 3956 | CG2 | ILE | D | 60 | 77.513 | 90.256 | -3.771 | 1.00 | 40.77 | D |
| ATOM | 3957 | CG1 | ILE | D | 60 | 76.946 | 88.280 | -5.239 | 1.00 | 40.77 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 3958 | CD1 | ILE | D | 60 | 78.061 | 88.489 | -6.226 | 1.00 | 40.77 | D |
| ATOM | 3959 | C | ILE | D | 60 | 78.497 | 88.375 | -1.703 | 1.00 | 35.08 | D |
| ATOM | 3960 | O | ILE | D | 60 | 79.406 | 89.079 | -1.261 | 1.00 | 35.08 | D |
| ATOM | 3961 | N | LEU | D | 61 | 77.522 | 87.896 | -0.938 | 1.00 | 37.37 | D |
| ATOM | 3962 | CA | LEU | D | 61 | 77.452 | 88.200 | 0.485 | 1.00 | 37.37 | D |
| ATOM | 3963 | CB | LEU | D | 61 | 76.125 | 87.713 | 1.071 | 1.00 | 42.70 | D |
| ATOM | 3964 | CG | LEU | D | 61 | 74.921 | 88.664 | 1.029 | 1.00 | 42.70 | D |
| ATOM | 3965 | CD1 | LEU | D | 61 | 74.498 | 88.975 | -0.404 | 1.00 | 42.70 | D |
| ATOM | 3966 | CD2 | LEU | D | 61 | 73.776 | 88.006 | 1.784 | 1.00 | 42.70 | D |
| ATOM | 3967 | C | LEU | D | 61 | 78.606 | 87.629 | 1.304 | 1.00 | 37.37 | D |
| ATOM | 3968 | O | LEU | D | 61 | 78.756 | 87.975 | 2.467 | 1.00 | 37.37 | D |
| ATOM | 3969 | N | ARG | D | 62 | 79.410 | 86.747 | 0.712 | 1.00 | 36.92 | D |
| ATOM | 3970 | CA | ARG | D | 62 | 80.538 | 86.183 | 1.446 | 1.00 | 36.92 | D |
| ATOM | 3971 | CB | ARG | D | 62 | 80.653 | 84.666 | 1.228 | 1.00 | 56.32 | D |
| ATOM | 3972 | CG | ARG | D | 62 | 79.572 | 83.838 | 1.930 | 1.00 | 56.32 | D |
| ATOM | 3973 | CD | ARG | D | 62 | 79.863 | 82.348 | 1.825 | 1.00 | 56.32 | D |
| ATOM | 3974 | NE | ARG | D | 62 | 78.653 | 81.562 | 1.577 | 1.00 | 56.32 | D |
| ATOM | 3975 | CZ | ARG | D | 62 | 77.859 | 81.063 | 2.523 | 1.00 | 56.32 | D |
| ATOM | 3976 | NH1 | ARG | D | 62 | 78.135 | 81.252 | 3.807 | 1.00 | 56.32 | D |
| ATOM | 3977 | NH2 | ARG | D | 62 | 76.776 | 80.379 | 2.180 | 1.00 | 56.32 | D |
| ATOM | 3978 | C | ARG | D | 62 | 81.822 | 86.889 | 1.028 | 1.00 | 36.92 | D |
| ATOM | 3979 | O | ARG | D | 62 | 82.926 | 86.392 | 1.244 | 1.00 | 36.92 | D |
| ATOM | 3980 | N | ARG | D | 63 | 81.670 | 88.059 | 0.423 | 1.00 | 37.56 | D |
| ATOM | 3981 | CA | ARG | D | 63 | 82.831 | 88.828 | 0.018 | 1.00 | 37.56 | D |
| ATOM | 3982 | CB | ARG | D | 63 | 82.446 | 89.891 | -0.999 | 1.00 | 47.92 | D |
| ATOM | 3983 | CG | ARG | D | 63 | 82.249 | 89.273 | -2.359 | 1.00 | 47.92 | D |
| ATOM | 3984 | CD | ARG | D | 63 | 81.915 | 90.272 | -3.415 | 1.00 | 47.92 | D |
| ATOM | 3985 | NE | ARG | D | 63 | 81.769 | 89.602 | -4.700 | 1.00 | 47.92 | D |
| ATOM | 3986 | CZ | ARG | D | 63 | 81.385 | 90.209 | -5.817 | 1.00 | 47.92 | D |
| ATOM | 3987 | NH1 | ARG | D | 63 | 81.108 | 91.510 | -5.798 | 1.00 | 47.92 | D |
| ATOM | 3988 | NH2 | ARG | D | 63 | 81.278 | 89.512 | -6.944 | 1.00 | 47.92 | D |
| ATOM | 3989 | C | ARG | D | 63 | 83.408 | 89.423 | 1.281 | 1.00 | 37.56 | D |
| ATOM | 3990 | O | ARG | D | 63 | 82.691 | 89.941 | 2.140 | 1.00 | 37.56 | D |
| ATOM | 3991 | N | ARG | D | 64 | 84.719 | 89.349 | 1.392 | 1.00 | 33.60 | D |
| ATOM | 3992 | CA | ARG | D | 64 | 85.368 | 89.786 | 2.598 | 1.00 | 33.60 | D |
| ATOM | 3993 | CB | ARG | D | 64 | 85.493 | 88.551 | 3.508 | 1.00 | 37.75 | D |
| ATOM | 3994 | CG | ARG | D | 64 | 85.167 | 88.749 | 4.971 | 1.00 | 37.75 | D |
| ATOM | 3995 | CD | ARG | D | 64 | 83.926 | 87.968 | 5.397 | 1.00 | 37.75 | D |
| ATOM | 3996 | NE | ARG | D | 64 | 82.798 | 88.345 | 4.571 | 1.00 | 37.75 | D |
| ATOM | 3997 | CZ | ARG | D | 64 | 81.547 | 87.936 | 4.739 | 1.00 | 37.75 | D |
| ATOM | 3998 | NH1 | ARG | D | 64 | 81.219 | 87.109 | 5.722 | 1.00 | 37.75 | D |
| ATOM | 3999 | NH2 | ARG | D | 64 | 80.621 | 88.379 | 3.905 | 1.00 | 37.75 | D |
| ATOM | 4000 | C | ARG | D | 64 | 86.755 | 90.353 | 2.300 | 1.00 | 33.60 | D |
| ATOM | 4001 | O | ARG | D | 64 | 87.267 | 90.248 | 1.183 | 1.00 | 33.60 | D |
| ATOM | 4002 | N | GLN | D | 65 | 87.338 | 90.986 | 3.308 | 1.00 | 37.58 | D |
| ATOM | 4003 | CA | GLN | D | 65 | 88.696 | 91.486 | 3.222 | 1.00 | 37.58 | D |
| ATOM | 4004 | CB | GLN | D | 65 | 88.776 | 92.985 | 3.470 | 1.00 | 44.35 | D |
| ATOM | 4005 | CG | GLN | D | 65 | 88.206 | 93.845 | 2.369 | 1.00 | 44.35 | D |
| ATOM | 4006 | CD | GLN | D | 65 | 88.575 | 95.308 | 2.551 | 1.00 | 44.35 | D |
| ATOM | 4007 | OE1 | GLN | D | 65 | 89.723 | 95.705 | 2.325 | 1.00 | 44.35 | D |
| ATOM | 4008 | NE2 | GLN | D | 65 | 87.604 | 96.115 | 2.982 | 1.00 | 44.35 | D |
| ATOM | 4009 | C | GLN | D | 65 | 89.295 | 90.733 | 4.405 | 1.00 | 37.58 | D |
| ATOM | 4010 | O | GLN | D | 65 | 88.663 | 90.620 | 5.449 | 1.00 | 37.58 | D |
| ATOM | 4011 | N | LEU | D | 66 | 90.488 | 90.189 | 4.248 | 1.00 | 36.57 | D |
| ATOM | 4012 | CA | LEU | D | 66 | 91.088 | 89.449 | 5.330 | 1.00 | 36.57 | D |
| ATOM | 4013 | CB | LEU | D | 66 | 91.546 | 88.087 | 4.819 | 1.00 | 36.18 | D |
| ATOM | 4014 | CG | LEU | D | 66 | 91.676 | 86.992 | 5.871 | 1.00 | 36.18 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|---------|--------|--------|------|-------|---|
| ATOM | 4015 | CD1 | LEU | D | 66 | 90.363 | 86.847 | 6.657 | 1.00 | 36.18 | D |
| ATOM | 4016 | CD2 | LEU | D | 66 | 92.040 | 85.684 | 5.168 | 1.00 | 36.18 | D |
| ATOM | 4017 | C | LEU | D | 66 | 92.245 | 90.269 | 5.869 | 1.00 | 36.57 | D |
| ATOM | 4018 | O | LEU | D | 66 | 93.322 | 90.330 | 5.275 | 1.00 | 36.57 | D |
| ATOM | 4019 | N | TYR | D | 67 | 92.002 | 90.904 | 7.008 | 1.00 | 33.90 | D |
| ATOM | 4020 | CA | TYR | D | 67 | 92.981 | 91.767 | 7.638 | 1.00 | 33.90 | D |
| ATOM | 4021 | CB | TYR | D | 67 | 92.248 | 92.923 | 8.327 | 1.00 | 38.66 | D |
| ATOM | 4022 | CG | TYR | D | 67 | 93.134 | 93.857 | 9.126 | 1.00 | 38.66 | D |
| ATOM | 4023 | CD1 | TYR | D | 67 | 94.012 | 94.740 | 8.491 | 1.00 | 38.66 | D |
| ATOM | 4024 | CE1 | TYR | D | 67 | 94.815 | 95.599 | 9.223 | 1.00 | 38.66 | D |
| ATOM | 4025 | CD2 | TYR | D | 67 | 93.089 | 93.861 | 10.520 | 1.00 | 38.66 | D |
| ATOM | 4026 | CE2 | TYR | D | 67 | 93.890 | 94.717 | 11.262 | 1.00 | 38.66 | D |
| ATOM | 4027 | CZ | TYR | D | 67 | 94.751 | 95.584 | 10.605 | 1.00 | 38.66 | D |
| ATOM | 4028 | OH | TYR | D | 67 | 95.551 | 96.428 | 11.343 | 1.00 | 38.66 | D |
| ATOM | 4029 | C | TYR | D | 67 | 93.878 | 91.045 | 8.635 | 1.00 | 33.90 | D |
| ATOM | 4030 | O | TYR | D | 67 | 93.406 | 90.487 | 9.621 | 1.00 | 33.90 | D |
| ATOM | 4031 | N | CYS | D | 68 | 95.179 | 91.059 | 8.370 | 1.00 | 34.51 | D |
| ATOM | 4032 | CA | CYS | D | 68 | 96.136 | 90.425 | 9.265 | 1.00 | 34.51 | D |
| ATOM | 4033 | CB | CYS | D | 68 | 97.427 | 90.090 | 8.510 | 1.00 | 38.62 | D |
| ATOM | 4034 | SG | CYS | D | 68 | 98.499 | 88.931 | 9.390 | 1.00 | 38.62 | D |
| ATOM | 4035 | C | CYS | D | 68 | 96.422 | 91.424 | 10.388 | 1.00 | 34.51 | D |
| ATOM | 4036 | O | CYS | D | 68 | 96.511 | 92.625 | 10.134 | 1.00 | 34.51 | D |
| ATOM | 4037 | N | ARG | D | 69 | 96.546 | 90.935 | 11.622 | 1.00 | 43.41 | D |
| ATOM | 4038 | CA | ARG | D | 69 | 96.802 | 91.813 | 12.760 | 1.00 | 43.41 | D |
| ATOM | 4039 | CB | ARG | D | 69 | 96.841 | 91.015 | 14.067 | 1.00 | 65.33 | D |
| ATOM | 4040 | CG | ARG | D | 69 | 96.942 | 91.902 | 15.298 | 1.00 | 65.33 | D |
| ATOM | 4041 | CD | ARG | D | 69 | 96.692 | 91.136 | 16.583 | 1.00 | 65.33 | D |
| ATOM | 4042 | NE | ARG | D | 69 | 96.974 | 91.958 | 17.763 | 1.00 | 65.33 | D |
| ATOM | 4043 | CZ | ARG | D | 69 | 96.797 | 91.559 | 19.023 | 1.00 | 65.33 | D |
| ATOM | 4044 | NH1 | ARG | D | 69 | 96.333 | 90.342 | 19.277 | 1.00 | 65.33 | D |
| ATOM | 4045 | NH2 | ARG | D | 69 | 97.089 | 92.376 | 20.028 | 1.00 | 65.33 | D |
| ATOM | 4046 | C | ARG | D | 69 | 98.124 | 92.533 | 12.546 | 1.00 | 43.41 | D |
| ATOM | 4047 | O | ARG | D | 69 | 98.451 | 93.515 | 13.209 | 1.00 | 43.41 | D |
| ATOM | 4048 | N | THR | D | 70 | 98.872 | 92.035 | 11.582 | 1.00 | 50.64 | D |
| ATOM | 4049 | CA | THR | D | 70 | 100.158 | 92.588 | 11.250 | 1.00 | 50.64 | D |
| ATOM | 4050 | CB | THR | D | 70 | 100.893 | 91.563 | 10.355 | 1.00 | 43.03 | D |
| ATOM | 4051 | OG1 | THR | D | 70 | 102.225 | 91.376 | 10.840 | 1.00 | 43.03 | D |
| ATOM | 4052 | CG2 | THR | D | 70 | 100.895 | 91.979 | 8.924 | 1.00 | 43.03 | D |
| ATOM | 4053 | C | THR | D | 70 | 99.973 | 93.965 | 10.588 | 1.00 | 50.64 | D |
| ATOM | 4054 | O | THR | D | 70 | 100.930 | 94.715 | 10.401 | 1.00 | 50.64 | D |
| ATOM | 4055 | N | GLY | D | 71 | 98.726 | 94.300 | 10.261 | 1.00 | 38.67 | D |
| ATOM | 4056 | CA | GLY | D | 71 | 98.429 | 95.581 | 9.648 | 1.00 | 38.67 | D |
| ATOM | 4057 | C | GLY | D | 71 | 98.105 | 95.522 | 8.169 | 1.00 | 38.67 | D |
| ATOM | 4058 | O | GLY | D | 71 | 97.850 | 96.552 | 7.550 | 1.00 | 38.67 | D |
| ATOM | 4059 | N | PHE | D | 72 | 98.094 | 94.328 | 7.588 | 1.00 | 35.55 | D |
| ATOM | 4060 | CA | PHE | D | 72 | 97.824 | 94.214 | 6.159 | 1.00 | 35.55 | D |
| ATOM | 4061 | CB | PHE | D | 72 | 99.078 | 93.733 | 5.406 | 1.00 | 38.85 | D |
| ATOM | 4062 | CG | PHE | D | 72 | 100.327 | 94.508 | 5.724 | 1.00 | 38.85 | D |
| ATOM | 4063 | CD1 | PHE | D | 72 | 101.051 | 94.241 | 6.875 | 1.00 | 38.85 | D |
| ATOM | 4064 | CD2 | PHE | D | 72 | 100.786 | 95.507 | 4.861 | 1.00 | 38.85 | D |
| ATOM | 4065 | CE1 | PHE | D | 72 | 102.221 | 94.957 | 7.176 | 1.00 | 38.85 | D |
| ATOM | 4066 | CE2 | PHE | D | 72 | 101.957 | 96.233 | 5.148 | 1.00 | 38.85 | D |
| ATOM | 4067 | CZ | PHE | D | 72 | 102.674 | 95.955 | 6.307 | 1.00 | 38.85 | D |
| ATOM | 4068 | C | PHE | D | 72 | 96.680 | 93.292 | 5.763 | 1.00 | 35.55 | D |
| ATOM | 4069 | O | PHE | D | 72 | 96.394 | 92.294 | 6.430 | 1.00 | 35.55 | D |
| ATOM | 4070 | N | HIS | D | 73 | 96.048 | 93.637 | 4.648 | 1.00 | 40.58 | D |
| ATOM | 4071 | CA | HIS | D | 73 | 94.976 | 92.845 | 4.076 | 1.00 | 40.58 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|---------|--------|---------|------|-------|---|
| ATOM | 4072 | CB | HIS | D | 73 | 93.993 | 93.733 | 3.317 | 1.00 | 48.44 | D |
| ATOM | 4073 | CG | HIS | D | 73 | 93.149 | 94.596 | 4.198 | 1.00 | 48.44 | D |
| ATOM | 4074 | CD2 | HIS | D | 73 | 92.081 | 94.299 | 4.974 | 1.00 | 48.44 | D |
| ATOM | 4075 | ND1 | HIS | D | 73 | 93.359 | 95.949 | 4.337 | 1.00 | 48.44 | D |
| ATOM | 4076 | CE1 | HIS | D | 73 | 92.455 | 96.452 | 5.158 | 1.00 | 48.44 | D |
| ATOM | 4077 | NE2 | HIS | D | 73 | 91.668 | 95.471 | 5.559 | 1.00 | 48.44 | D |
| ATOM | 4078 | C | HIS | D | 73 | 95.622 | 91.876 | 3.090 | 1.00 | 40.58 | D |
| ATOM | 4079 | O | HIS | D | 73 | 96.547 | 92.243 | 2.377 | 1.00 | 40.58 | D |
| ATOM | 4080 | N | LEU | D | 74 | 95.141 | 90.644 | 3.035 | 1.00 | 39.53 | D |
| ATOM | 4081 | CA | LEU | D | 74 | 95.714 | 89.684 | 2.112 | 1.00 | 39.53 | D |
| ATOM | 4082 | CB | LEU | D | 74 | 95.354 | 88.267 | 2.538 | 1.00 | 38.15 | D |
| ATOM | 4083 | CG | LEU | D | 74 | 96.038 | 87.167 | 1.732 | 1.00 | 38.15 | D |
| ATOM | 4084 | CD1 | LEU | D | 74 | 96.466 | 86.054 | 2.669 | 1.00 | 38.15 | D |
| ATOM | 4085 | CD2 | LEU | D | 74 | 95.099 | 86.659 | 0.641 | 1.00 | 38.15 | D |
| ATOM | 4086 | C | LEU | D | 74 | 95.222 | 89.950 | 0.694 | 1.00 | 39.53 | D |
| ATOM | 4087 | O | LEU | D | 74 | 94.045 | 90.230 | 0.473 | 1.00 | 39.53 | D |
| ATOM | 4088 | N | GLU | D | 75 | 96.140 | 89.867 | -0.268 | 1.00 | 44.34 | D |
| ATOM | 4089 | CA | GLU | D | 75 | 95.822 | 90.099 | -1.667 | 1.00 | 44.34 | D |
| ATOM | 4090 | CB | GLU | D | 75 | 96.595 | 91.302 | -2.189 | 1.00 | 46.41 | D |
| ATOM | 4091 | CG | GLU | D | 75 | 96.105 | 92.631 | -1.694 | 1.00 | 46.41 | D |
| ATOM | 4092 | CD | GLU | D | 75 | 97.019 | 93.751 | -2.106 | 1.00 | 46.41 | D |
| ATOM | 4093 | OE1 | GLU | D | 75 | 98.156 | 93.785 | -1.592 | 1.00 | 46.41 | D |
| ATOM | 4094 | OE2 | GLU | D | 75 | 96.604 | 94.588 | -2.937 | 1.00 | 46.41 | D |
| ATOM | 4095 | C | GLU | D | 75 | 96.187 | 88.914 | -2.517 | 1.00 | 44.34 | D |
| ATOM | 4096 | O | GLU | D | 75 | 97.176 | 88.240 | -2.263 | 1.00 | 44.34 | D |
| ATOM | 4097 | N | ILE | D | 76 | 95.394 | 88.665 | -3.546 | 1.00 | 35.83 | D |
| ATOM | 4098 | CA | ILE | D | 76 | 95.678 | 87.565 | -4.461 | 1.00 | 35.83 | D |
| ATOM | 4099 | CB | ILE | D | 76 | 94.551 | 86.524 | -4.443 | 1.00 | 39.96 | D |
| ATOM | 4100 | CG2 | ILE | D | 76 | 94.878 | 85.401 | -5.409 | 1.00 | 39.96 | D |
| ATOM | 4101 | CG1 | ILE | D | 76 | 94.361 | 86.005 | -3.011 | 1.00 | 39.96 | D |
| ATOM | 4102 | CD1 | ILE | D | 76 | 93.289 | 84.948 | -2.848 | 1.00 | 39.96 | D |
| ATOM | 4103 | C | ILE | D | 76 | 95.815 | 88.152 | -5.864 | 1.00 | 35.83 | D |
| ATOM | 4104 | O | ILE | D | 76 | 94.817 | 88.476 | -6.509 | 1.00 | 35.83 | D |
| ATOM | 4105 | N | PHE | D | 77 | 97.053 | 88.304 | -6.329 | 1.00 | 43.90 | D |
| ATOM | 4106 | CA | PHE | D | 77 | 97.292 | 88.877 | -7.649 | 1.00 | 43.90 | D |
| ATOM | 4107 | CB | PHE | D | 77 | 98.687 | 89.486 | -7.714 | 1.00 | 46.13 | D |
| ATOM | 4108 | CG | PHE | D | 77 | 98.816 | 90.749 | -6.924 | 1.00 | 46.13 | D |
| ATOM | 4109 | CD1 | PHE | D | 77 | 99.148 | 90.714 | -5.574 | 1.00 | 46.13 | D |
| ATOM | 4110 | CD2 | PHE | D | 77 | 98.536 | 91.985 | -7.514 | 1.00 | 46.13 | D |
| ATOM | 4111 | CE1 | PHE | D | 77 | 99.198 | 91.891 | -4.824 | 1.00 | 46.13 | D |
| ATOM | 4112 | CE2 | PHE | D | 77 | 98.585 | 93.172 | -6.765 | 1.00 | 46.13 | D |
| ATOM | 4113 | CZ | PHE | D | 77 | 98.915 | 93.123 | -5.422 | 1.00 | 46.13 | D |
| ATOM | 4114 | C | PHE | D | 77 | 97.080 | 87.922 | -8.814 | 1.00 | 43.90 | D |
| ATOM | 4115 | O | PHE | D | 77 | 97.268 | 86.712 | -8.688 | 1.00 | 43.90 | D |
| ATOM | 4116 | N | PRO | D | 78 | 96.661 | 88.465 | -9.969 | 1.00 | 52.17 | D |
| ATOM | 4117 | CD | PRO | D | 78 | 96.356 | 89.893 | -10.193 | 1.00 | 38.51 | D |
| ATOM | 4118 | CA | PRO | D | 78 | 96.412 | 87.678 | -11.182 | 1.00 | 52.17 | D |
| ATOM | 4119 | CB | PRO | D | 78 | 96.156 | 88.742 | -12.242 | 1.00 | 38.51 | D |
| ATOM | 4120 | CG | PRO | D | 78 | 95.522 | 89.850 | -11.456 | 1.00 | 38.51 | D |
| ATOM | 4121 | C | PRO | D | 78 | 97.570 | 86.763 | -11.555 | 1.00 | 52.17 | D |
| ATOM | 4122 | O | PRO | D | 78 | 97.351 | 85.695 | -12.122 | 1.00 | 52.17 | D |
| ATOM | 4123 | N | ASN | D | 79 | 98.798 | 87.169 | -11.240 | 1.00 | 51.23 | D |
| ATOM | 4124 | CA | ASN | D | 79 | 99.946 | 86.337 | -11.569 | 1.00 | 51.23 | D |
| ATOM | 4125 | CB | ASN | D | 79 | 101.202 | 87.189 | -11.839 | 1.00 | 61.00 | D |
| ATOM | 4126 | CG | ASN | D | 79 | 101.710 | 87.950 | -10.619 | 1.00 | 61.00 | D |
| ATOM | 4127 | OD1 | ASN | D | 79 | 101.277 | 87.744 | -9.486 | 1.00 | 61.00 | D |
| ATOM | 4128 | ND2 | ASN | D | 79 | 102.679 | 88.824 | -10.890 | 1.00 | 61.00 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|---------|---------|---------|------|-------|---|
| ATOM | 4129 | C | ASN | D | 79 | 100.245 | 85.245 | -10.540 | 1.00 | 51.23 | D |
| ATOM | 4130 | O | ASN | D | 79 | 101.346 | 84.690 | -10.517 | 1.00 | 51.23 | D |
| ATOM | 4131 | N | GLY | D | 80 | 99.253 | 84.930 | -9.706 | 1.00 | 38.19 | D |
| ATOM | 4132 | CA | GLY | D | 80 | 99.413 | 83.884 | -8.702 | 1.00 | 38.19 | D |
| ATOM | 4133 | C | GLY | D | 80 | 100.249 | 84.266 | -7.495 | 1.00 | 38.19 | D |
| ATOM | 4134 | O | GLY | D | 80 | 100.559 | 83.436 | -6.654 | 1.00 | 38.19 | D |
| ATOM | 4135 | N | THR | D | 81 | 100.615 | 85.534 | -7.411 | 1.00 | 47.14 | D |
| ATOM | 4136 | CA | THR | D | 81 | 101.423 | 86.022 | -6.305 | 1.00 | 47.14 | D |
| ATOM | 4137 | CB | THR | D | 81 | 102.348 | 87.173 | -6.808 | 1.00 | 57.15 | D |
| ATOM | 4138 | OG1 | THR | D | 81 | 103.588 | 86.604 | -7.251 | 1.00 | 57.15 | D |
| ATOM | 4139 | CG2 | THR | D | 81 | 102.606 | 88.211 | -5.733 | 1.00 | 57.15 | D |
| ATOM | 4140 | C | THR | D | 81 | 100.543 | 86.485 | -5.139 | 1.00 | 47.14 | D |
| ATOM | 4141 | O | THR | D | 81 | 99.392 | 86.881 | -5.342 | 1.00 | 47.14 | D |
| ATOM | 4142 | N | ILE | D | 82 | 101.085 | 86.406 | -3.921 | 1.00 | 44.74 | D |
| ATOM | 4143 | CA | ILE | D | 82 | 100.369 | 86.832 | -2.725 | 1.00 | 44.74 | D |
| ATOM | 4144 | CB | ILE | D | 82 | 100.098 | 85.657 | -1.745 | 1.00 | 33.10 | D |
| ATOM | 4145 | CG2 | ILE | D | 82 | 99.292 | 86.165 | -0.543 | 1.00 | 33.10 | D |
| ATOM | 4146 | CG1 | ILE | D | 82 | 99.319 | 84.537 | -2.435 | 1.00 | 33.10 | D |
| ATOM | 4147 | CD1 | ILE | D | 82 | 97.988 | 84.971 | -2.969 | 1.00 | 33.10 | D |
| ATOM | 4148 | C | ILE | D | 82 | 101.174 | 87.870 | -1.952 | 1.00 | 44.74 | D |
| ATOM | 4149 | O | ILE | D | 82 | 102.397 | 87.768 | -1.844 | 1.00 | 44.74 | D |
| ATOM | 4150 | N | GLN | D | 83 | 100.483 | 88.871 | -1.416 | 1.00 | 53.73 | D |
| ATOM | 4151 | CA | GLN | D | 83 | 101.126 | 89.898 | -0.608 | 1.00 | 53.73 | D |
| ATOM | 4152 | CB | GLN | D | 83 | 101.964 | 90.843 | -1.469 | 1.00 | 70.07 | D |
| ATOM | 4153 | CG | GLN | D | 83 | 101.219 | 91.534 | -2.574 | 1.00 | 70.07 | D |
| ATOM | 4154 | CD | GLN | D | 83 | 102.132 | 92.400 | -3.422 | 1.00 | 70.07 | D |
| ATOM | 4155 | OE1 | GLN | D | 83 | 102.690 | 93.382 | -2.944 | 1.00 | 70.07 | D |
| ATOM | 4156 | NE2 | GLN | D | 83 | 102.294 | 92.031 | -4.687 | 1.00 | 70.07 | D |
| ATOM | 4157 | C | GLN | D | 83 | 100.074 | 90.675 | 0.162 | 1.00 | 53.73 | D |
| ATOM | 4158 | O | GLN | D | 83 | 98.876 | 90.511 | -0.074 | 1.00 | 53.73 | D |
| ATOM | 4159 | N | GLY | D | 84 | 100.520 | 91.506 | 1.096 | 1.00 | 56.43 | D |
| ATOM | 4160 | CA | GLY | D | 84 | 99.587 | 92.273 | 1.889 | 1.00 | 56.43 | D |
| ATOM | 4161 | C | GLY | D | 84 | 99.651 | 93.750 | 1.591 | 1.00 | 56.43 | D |
| ATOM | 4162 | O | GLY | D | 84 | 100.669 | 94.251 | 1.112 | 1.00 | 56.43 | D |
| ATOM | 4163 | N | THR | D | 85 | 98.559 | 94.450 | 1.878 | 1.00 | 50.58 | D |
| ATOM | 4164 | CA | THR | D | 85 | 98.487 | 95.882 | 1.650 | 1.00 | 50.58 | D |
| ATOM | 4165 | CB | THR | D | 85 | 97.791 | 96.202 | 0.330 | 1.00 | 42.66 | D |
| ATOM | 4166 | OG1 | THR | D | 85 | 97.776 | 97.619 | 0.142 | 1.00 | 42.66 | D |
| ATOM | 4167 | CG2 | THR | D | 85 | 96.365 | 95.688 | 0.339 | 1.00 | 42.66 | D |
| ATOM | 4168 | C | THR | D | 85 | 97.728 | 96.577 | 2.768 | 1.00 | 50.58 | D |
| ATOM | 4169 | O | THR | D | 85 | 96.665 | 96.120 | 3.192 | 1.00 | 50.58 | D |
| ATOM | 4170 | N | ARG | D | 86 | 98.282 | 97.687 | 3.243 | 1.00 | 43.79 | D |
| ATOM | 4171 | CA | ARG | D | 86 | 97.656 | 98.460 | 4.306 | 1.00 | 43.79 | D |
| ATOM | 4172 | CB | ARG | D | 86 | 98.632 | 99.519 | 4.828 | 1.00 | 62.75 | D |
| ATOM | 4173 | CG | ARG | D | 86 | 99.804 | 98.948 | 5.612 | 1.00 | 62.75 | D |
| ATOM | 4174 | CD | ARG | D | 86 | 100.765 | 100.040 | 6.061 | 1.00 | 62.75 | D |
| ATOM | 4175 | NE | ARG | D | 86 | 101.803 | 99.554 | 6.974 | 1.00 | 62.75 | D |
| ATOM | 4176 | CZ | ARG | D | 86 | 101.578 | 99.111 | 8.213 | 1.00 | 62.75 | D |
| ATOM | 4177 | NH1 | ARG | D | 86 | 100.340 | 99.086 | 8.701 | 1.00 | 62.75 | D |
| ATOM | 4178 | NH2 | ARG | D | 86 | 102.593 | 98.703 | 8.972 | 1.00 | 62.75 | D |
| ATOM | 4179 | C | ARG | D | 86 | 96.376 | 99.118 | 3.792 | 1.00 | 43.79 | D |
| ATOM | 4180 | O | ARG | D | 86 | 95.472 | 99.417 | 4.563 | 1.00 | 43.79 | D |
| ATOM | 4181 | N | LYS | D | 87 | 96.297 | 99.321 | 2.481 | 1.00 | 53.52 | D |
| ATOM | 4182 | CA | LYS | D | 87 | 95.130 | 99.953 | 1.874 | 1.00 | 53.52 | D |
| ATOM | 4183 | CB | LYS | D | 87 | 95.336 | 100.094 | 0.366 | 1.00 | 77.32 | D |
| ATOM | 4184 | CG | LYS | D | 87 | 96.521 | 100.978 | 0.027 | 1.00 | 77.32 | D |
| ATOM | 4185 | CD | LYS | D | 87 | 96.897 | 100.907 | -1.439 | 1.00 | 77.32 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|--------|---------|---------|------|-------|---|
| ATOM | 4186 | CE | LYS | D | 87 | 98.142 | 101.741 | -1.712 | 1.00 | 77.32 | D |
| ATOM | 4187 | NZ | LYS | D | 87 | 98.610 | 101.608 | -3.123 | 1.00 | 77.32 | D |
| ATOM | 4188 | C | LYS | D | 87 | 93.846 | 99.192 | 2.153 | 1.00 | 53.52 | D |
| ATOM | 4189 | O | LYS | D | 87 | 93.847 | 97.970 | 2.307 | 1.00 | 53.52 | D |
| ATOM | 4190 | N | ASP | D | 88 | 92.748 | 99.929 | 2.232 | 1.00 | 46.76 | D |
| ATOM | 4191 | CA | ASP | D | 88 | 91.443 | 99.338 | 2.482 | 1.00 | 46.76 | D |
| ATOM | 4192 | CB | ASP | D | 88 | 90.643 | 100.243 | 3.425 | 1.00 | 47.07 | D |
| ATOM | 4193 | CG | ASP | D | 88 | 89.224 | 99.757 | 3.653 | 1.00 | 47.07 | D |
| ATOM | 4194 | OD1 | ASP | D | 88 | 89.030 | 98.551 | 3.909 | 1.00 | 47.07 | D |
| ATOM | 4195 | OD2 | ASP | D | 88 | 88.296 | 100.592 | 3.591 | 1.00 | 47.07 | D |
| ATOM | 4196 | C | ASP | D | 88 | 90.746 | 99.197 | 1.138 | 1.00 | 46.76 | D |
| ATOM | 4197 | O | ASP | D | 88 | 90.877 | 100.058 | 0.270 | 1.00 | 46.76 | D |
| ATOM | 4198 | N | HIS | D | 89 | 90.022 | 98.102 | 0.956 | 1.00 | 43.41 | D |
| ATOM | 4199 | CA | HIS | D | 89 | 89.318 | 97.870 | -0.299 | 1.00 | 43.41 | D |
| ATOM | 4200 | CB | HIS | D | 89 | 88.199 | 98.897 | -0.482 | 1.00 | 46.70 | D |
| ATOM | 4201 | CG | HIS | D | 89 | 86.993 | 98.617 | 0.353 | 1.00 | 46.70 | D |
| ATOM | 4202 | CD2 | HIS | D | 89 | 85.845 | 97.958 | 0.064 | 1.00 | 46.70 | D |
| ATOM | 4203 | ND1 | HIS | D | 89 | 86.907 | 98.978 | 1.679 | 1.00 | 46.70 | D |
| ATOM | 4204 | CE1 | HIS | D | 89 | 85.757 | 98.552 | 2.172 | 1.00 | 46.70 | D |
| ATOM | 4205 | NE2 | HIS | D | 89 | 85.095 | 97.930 | 1.213 | 1.00 | 46.70 | D |
| ATOM | 4206 | C | HIS | D | 89 | 90.212 | 97.877 | -1.540 | 1.00 | 43.41 | D |
| ATOM | 4207 | O | HIS | D | 89 | 89.816 | 98.393 | -2.591 | 1.00 | 43.41 | D |
| ATOM | 4208 | N | SER | D | 90 | 91.408 | 97.304 | -1.425 | 1.00 | 47.53 | D |
| ATOM | 4209 | CA | SER | D | 90 | 92.313 | 97.247 | -2.566 | 1.00 | 47.53 | D |
| ATOM | 4210 | CB | SER | D | 90 | 93.697 | 96.786 | -2.137 | 1.00 | 54.51 | D |
| ATOM | 4211 | OG | SER | D | 90 | 93.686 | 95.404 | -1.860 | 1.00 | 54.51 | D |
| ATOM | 4212 | C | SER | D | 90 | 91.737 | 96.265 | -3.583 | 1.00 | 47.53 | D |
| ATOM | 4213 | O | SER | D | 90 | 91.098 | 95.282 | -3.221 | 1.00 | 47.53 | D |
| ATOM | 4214 | N | ARG | D | 91 | 91.971 | 96.544 | -4.857 | 1.00 | 47.05 | D |
| ATOM | 4215 | CA | ARG | D | 91 | 91.469 | 95.722 | -5.950 | 1.00 | 47.05 | D |
| ATOM | 4216 | CB | ARG | D | 91 | 92.181 | 96.135 | -7.244 | 1.00 | 79.19 | D |
| ATOM | 4217 | CG | ARG | D | 91 | 91.706 | 95.425 | -8.499 | 1.00 | 79.19 | D |
| ATOM | 4218 | CD | ARG | D | 91 | 92.532 | 95.849 | -9.707 | 1.00 | 79.19 | D |
| ATOM | 4219 | NE | ARG | D | 91 | 92.236 | 95.042 | -10.890 | 1.00 | 79.19 | D |
| ATOM | 4220 | CZ | ARG | D | 91 | 92.905 | 95.123 | -12.038 | 1.00 | 79.19 | D |
| ATOM | 4221 | NH1 | ARG | D | 91 | 93.912 | 95.978 | -12.162 | 1.00 | 79.19 | D |
| ATOM | 4222 | NH2 | ARG | D | 91 | 92.577 | 94.340 | -13.057 | 1.00 | 79.19 | D |
| ATOM | 4223 | C | ARG | D | 91 | 91.601 | 94.209 | -5.735 | 1.00 | 47.05 | D |
| ATOM | 4224 | O | ARG | D | 91 | 90.643 | 93.459 | -5.920 | 1.00 | 47.05 | D |
| ATOM | 4225 | N | PHE | D | 92 | 92.785 | 93.763 | -5.339 | 1.00 | 49.96 | D |
| ATOM | 4226 | CA | PHE | D | 92 | 93.024 | 92.342 | -5.154 | 1.00 | 49.96 | D |
| ATOM | 4227 | CB | PHE | D | 92 | 94.396 | 91.994 | -5.730 | 1.00 | 47.04 | D |
| ATOM | 4228 | CG | PHE | D | 92 | 94.533 | 92.362 | -7.176 | 1.00 | 47.04 | D |
| ATOM | 4229 | CD1 | PHE | D | 92 | 93.747 | 91.732 | -8.143 | 1.00 | 47.04 | D |
| ATOM | 4230 | CD2 | PHE | D | 92 | 95.392 | 93.387 | -7.573 | 1.00 | 47.04 | D |
| ATOM | 4231 | CE1 | PHE | D | 92 | 93.808 | 92.119 | -9.489 | 1.00 | 47.04 | D |
| ATOM | 4232 | CE2 | PHE | D | 92 | 95.460 | 93.781 | -8.914 | 1.00 | 47.04 | D |
| ATOM | 4233 | CZ | PHE | D | 92 | 94.662 | 93.141 | -9.873 | 1.00 | 47.04 | D |
| ATOM | 4234 | C | PHE | D | 92 | 92.897 | 91.881 | -3.713 | 1.00 | 49.96 | D |
| ATOM | 4235 | O | PHE | D | 92 | 93.260 | 90.748 | -3.378 | 1.00 | 49.96 | D |
| ATOM | 4236 | N | GLY | D | 93 | 92.368 | 92.771 | -2.875 | 1.00 | 44.36 | D |
| ATOM | 4237 | CA | GLY | D | 93 | 92.157 | 92.466 | -1.473 | 1.00 | 44.36 | D |
| ATOM | 4238 | C | GLY | D | 93 | 90.716 | 92.045 | -1.219 | 1.00 | 44.36 | D |
| ATOM | 4239 | O | GLY | D | 93 | 90.361 | 91.680 | -0.101 | 1.00 | 44.36 | D |
| ATOM | 4240 | N | ILE | D | 94 | 89.882 | 92.099 | -2.255 | 1.00 | 47.02 | D |
| ATOM | 4241 | CA | ILE | D | 94 | 88.482 | 91.697 | -2.141 | 1.00 | 47.02 | D |
| ATOM | 4242 | CB | ILE | D | 94 | 87.600 | 92.417 | -3.177 | 1.00 | 39.61 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4243 | CG2 | ILE | D | 94 | 86.143 | 92.016 | -2.979 | 1.00 | 39.61 | D |
| ATOM | 4244 | CG1 | ILE | D | 94 | 87.779 | 93.931 | -3.058 | 1.00 | 39.61 | D |
| ATOM | 4245 | CD1 | ILE | D | 94 | 87.448 | 94.491 | -1.682 | 1.00 | 39.61 | D |
| ATOM | 4246 | C | ILE | D | 94 | 88.412 | 90.193 | -2.406 | 1.00 | 47.02 | D |
| ATOM | 4247 | O | ILE | D | 94 | 88.647 | 89.742 | -3.529 | 1.00 | 47.02 | D |
| ATOM | 4248 | N | LEU | D | 95 | 88.073 | 89.423 | -1.375 | 1.00 | 44.82 | D |
| ATOM | 4249 | CA | LEU | D | 95 | 88.019 | 87.971 | -1.488 | 1.00 | 44.82 | D |
| ATOM | 4250 | CB | LEU | D | 95 | 88.994 | 87.369 | -0.481 | 1.00 | 31.17 | D |
| ATOM | 4251 | CG | LEU | D | 95 | 90.243 | 88.226 | -0.213 | 1.00 | 31.17 | D |
| ATOM | 4252 | CD1 | LEU | D | 95 | 90.960 | 87.729 | 1.029 | 1.00 | 31.17 | D |
| ATOM | 4253 | CD2 | LEU | D | 95 | 91.181 | 88.198 | -1.424 | 1.00 | 31.17 | D |
| ATOM | 4254 | C | LEU | D | 95 | 86.629 | 87.414 | -1.225 | 1.00 | 44.82 | D |
| ATOM | 4255 | O | LEU | D | 95 | 85.858 | 88.003 | -0.489 | 1.00 | 44.82 | D |
| ATOM | 4256 | N | GLU | D | 96 | 86.316 | 86.272 | -1.826 | 1.00 | 37.43 | D |
| ATOM | 4257 | CA | GLU | D | 96 | 85.030 | 85.614 | -1.617 | 1.00 | 37.43 | D |
| ATOM | 4258 | CB | GLU | D | 96 | 84.392 | 85.213 | -2.937 | 1.00 | 47.59 | D |
| ATOM | 4259 | CG | GLU | D | 96 | 83.007 | 84.620 | -2.777 | 1.00 | 47.59 | D |
| ATOM | 4260 | CD | GLU | D | 96 | 82.672 | 83.615 | -3.862 | 1.00 | 47.59 | D |
| ATOM | 4261 | OE1 | GLU | D | 96 | 83.309 | 83.676 | -4.930 | 1.00 | 47.59 | D |
| ATOM | 4262 | OE2 | GLU | D | 96 | 81.777 | 82.767 | -3.660 | 1.00 | 47.59 | D |
| ATOM | 4263 | C | GLU | D | 96 | 85.287 | 84.351 | -0.811 | 1.00 | 37.43 | D |
| ATOM | 4264 | O | GLU | D | 96 | 86.035 | 83.470 | -1.244 | 1.00 | 37.43 | D |
| ATOM | 4265 | N | PHE | D | 97 | 84.678 | 84.260 | 0.367 | 1.00 | 50.19 | D |
| ATOM | 4266 | CA | PHE | D | 97 | 84.848 | 83.083 | 1.202 | 1.00 | 50.19 | D |
| ATOM | 4267 | CB | PHE | D | 97 | 84.579 | 83.412 | 2.654 | 1.00 | 33.14 | D |
| ATOM | 4268 | CG | PHE | D | 97 | 85.804 | 83.787 | 3.422 | 1.00 | 33.14 | D |
| ATOM | 4269 | CD1 | PHE | D | 97 | 86.515 | 84.937 | 3.108 | 1.00 | 33.14 | D |
| ATOM | 4270 | CD2 | PHE | D | 97 | 86.243 | 82.994 | 4.476 | 1.00 | 33.14 | D |
| ATOM | 4271 | CE1 | PHE | D | 97 | 87.653 | 85.297 | 3.833 | 1.00 | 33.14 | D |
| ATOM | 4272 | CE2 | PHE | D | 97 | 87.383 | 83.340 | 5.212 | 1.00 | 33.14 | D |
| ATOM | 4273 | CZ | PHE | D | 97 | 88.088 | 84.498 | 4.890 | 1.00 | 33.14 | D |
| ATOM | 4274 | C | PHE | D | 97 | 83.935 | 81.954 | 0.771 | 1.00 | 50.19 | D |
| ATOM | 4275 | O | PHE | D | 97 | 82.754 | 82.158 | 0.478 | 1.00 | 50.19 | D |
| ATOM | 4276 | N | ILE | D | 98 | 84.499 | 80.756 | 0.731 | 1.00 | 34.44 | D |
| ATOM | 4277 | CA | ILE | D | 98 | 83.757 | 79.574 | 0.341 | 1.00 | 34.44 | D |
| ATOM | 4278 | CB | ILE | D | 98 | 84.413 | 78.903 | -0.874 | 1.00 | 44.32 | D |
| ATOM | 4279 | CG2 | ILE | D | 98 | 83.565 | 77.727 | -1.340 | 1.00 | 44.32 | D |
| ATOM | 4280 | CG1 | ILE | D | 98 | 84.580 | 79.937 | -1.991 | 1.00 | 44.32 | D |
| ATOM | 4281 | CD1 | ILE | D | 98 | 85.394 | 79.465 | -3.168 | 1.00 | 44.32 | D |
| ATOM | 4282 | C | ILE | D | 98 | 83.742 | 78.606 | 1.516 | 1.00 | 34.44 | D |
| ATOM | 4283 | O | ILE | D | 98 | 84.788 | 78.151 | 1.983 | 1.00 | 34.44 | D |
| ATOM | 4284 | N | SER | D | 99 | 82.544 | 78.300 | 1.996 | 1.00 | 40.20 | D |
| ATOM | 4285 | CA | SER | D | 99 | 82.393 | 77.400 | 3.122 | 1.00 | 40.20 | D |
| ATOM | 4286 | CB | SER | D | 99 | 81.057 | 77.661 | 3.814 | 1.00 | 50.16 | D |
| ATOM | 4287 | OG | SER | D | 99 | 81.026 | 77.009 | 5.070 | 1.00 | 50.16 | D |
| ATOM | 4288 | C | SER | D | 99 | 82.466 | 75.963 | 2.635 | 1.00 | 40.20 | D |
| ATOM | 4289 | O | SER | D | 99 | 81.514 | 75.445 | 2.060 | 1.00 | 40.20 | D |
| ATOM | 4290 | N | ILE | D | 100 | 83.601 | 75.319 | 2.863 | 1.00 | 40.10 | D |
| ATOM | 4291 | CA | ILE | D | 100 | 83.787 | 73.942 | 2.431 | 1.00 | 40.10 | D |
| ATOM | 4292 | CB | ILE | D | 100 | 85.296 | 73.558 | 2.426 | 1.00 | 34.87 | D |
| ATOM | 4293 | CG2 | ILE | D | 100 | 85.471 | 72.097 | 1.992 | 1.00 | 34.87 | D |
| ATOM | 4294 | CG1 | ILE | D | 100 | 86.071 | 74.482 | 1.464 | 1.00 | 34.87 | D |
| ATOM | 4295 | CD1 | ILE | D | 100 | 85.612 | 74.400 | 0.003 | 1.00 | 34.87 | D |
| ATOM | 4296 | C | ILE | D | 100 | 83.020 | 73.009 | 3.356 | 1.00 | 40.10 | D |
| ATOM | 4297 | O | ILE | D | 100 | 82.278 | 72.145 | 2.905 | 1.00 | 40.10 | D |
| ATOM | 4298 | N | ALA | D | 101 | 83.197 | 73.214 | 4.655 | 1.00 | 41.36 | D |
| ATOM | 4299 | CA | ALA | D | 101 | 82.546 | 72.427 | 5.690 | 1.00 | 41.36 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4300 | CB | ALA | D | 101 | 83.238 | 71.082 | 5.826 | 1.00 | 24.32 | D |
| ATOM | 4301 | C | ALA | D | 101 | 82.719 | 73.248 | 6.965 | 1.00 | 41.36 | D |
| ATOM | 4302 | O | ALA | D | 101 | 83.469 | 74.228 | 6.964 | 1.00 | 41.36 | D |
| ATOM | 4303 | N | VAL | D | 102 | 82.042 | 72.882 | 8.051 | 1.00 | 37.27 | D |
| ATOM | 4304 | CA | VAL | D | 102 | 82.219 | 73.664 | 9.269 | 1.00 | 37.27 | D |
| ATOM | 4305 | CB | VAL | D | 102 | 81.302 | 73.180 | 10.454 | 1.00 | 43.49 | D |
| ATOM | 4306 | CG1 | VAL | D | 102 | 79.879 | 72.964 | 9.956 | 1.00 | 43.49 | D |
| ATOM | 4307 | CG2 | VAL | D | 102 | 81.841 | 71.919 | 11.082 | 1.00 | 43.49 | D |
| ATOM | 4308 | C | VAL | D | 102 | 83.688 | 73.552 | 9.650 | 1.00 | 37.27 | D |
| ATOM | 4309 | O | VAL | D | 102 | 84.252 | 72.454 | 9.717 | 1.00 | 37.27 | D |
| ATOM | 4310 | N | GLY | D | 103 | 84.315 | 74.700 | 9.852 | 1.00 | 36.63 | D |
| ATOM | 4311 | CA | GLY | D | 103 | 85.717 | 74.726 | 10.210 | 1.00 | 36.63 | D |
| ATOM | 4312 | C | GLY | D | 103 | 86.636 | 74.795 | 9.010 | 1.00 | 36.63 | D |
| ATOM | 4313 | O | GLY | D | 103 | 87.833 | 75.019 | 9.168 | 1.00 | 36.63 | D |
| ATOM | 4314 | N | LEU | D | 104 | 86.093 | 74.621 | 7.810 | 1.00 | 31.40 | D |
| ATOM | 4315 | CA | LEU | D | 104 | 86.922 | 74.639 | 6.612 | 1.00 | 31.40 | D |
| ATOM | 4316 | CB | LEU | D | 104 | 86.944 | 73.255 | 5.963 | 1.00 | 33.42 | D |
| ATOM | 4317 | CG | LEU | D | 104 | 87.448 | 72.103 | 6.822 | 1.00 | 33.42 | D |
| ATOM | 4318 | CD1 | LEU | D | 104 | 87.385 | 70.810 | 6.018 | 1.00 | 33.42 | D |
| ATOM | 4319 | CD2 | LEU | D | 104 | 88.870 | 72.403 | 7.280 | 1.00 | 33.42 | D |
| ATOM | 4320 | C | LEU | D | 104 | 86.491 | 75.646 | 5.567 | 1.00 | 31.40 | D |
| ATOM | 4321 | O | LEU | D | 104 | 85.316 | 75.707 | 5.194 | 1.00 | 31.40 | D |
| ATOM | 4322 | N | VAL | D | 105 | 87.447 | 76.419 | 5.063 | 1.00 | 32.85 | D |
| ATOM | 4323 | CA | VAL | D | 105 | 87.115 | 77.408 | 4.051 | 1.00 | 32.85 | D |
| ATOM | 4324 | CB | VAL | D | 105 | 87.151 | 78.854 | 4.623 | 1.00 | 28.26 | D |
| ATOM | 4325 | CG1 | VAL | D | 105 | 86.236 | 78.972 | 5.823 | 1.00 | 28.26 | D |
| ATOM | 4326 | CG2 | VAL | D | 105 | 88.588 | 79.214 | 5.005 | 1.00 | 28.26 | D |
| ATOM | 4327 | C | VAL | D | 105 | 88.075 | 77.391 | 2.875 | 1.00 | 32.85 | D |
| ATOM | 4328 | O | VAL | D | 105 | 89.135 | 76.761 | 2.908 | 1.00 | 32.85 | D |
| ATOM | 4329 | N | SER | D | 106 | 87.659 | 78.092 | 1.833 | 1.00 | 35.69 | D |
| ATOM | 4330 | CA | SER | D | 106 | 88.453 | 78.300 | 0.644 | 1.00 | 35.69 | D |
| ATOM | 4331 | CB | SER | D | 106 | 87.910 | 77.514 | -0.549 | 1.00 | 34.35 | D |
| ATOM | 4332 | OG | SER | D | 106 | 88.341 | 76.166 | -0.476 | 1.00 | 34.35 | D |
| ATOM | 4333 | C | SER | D | 106 | 88.281 | 79.801 | 0.440 | 1.00 | 35.69 | D |
| ATOM | 4334 | O | SER | D | 106 | 87.247 | 80.368 | 0.799 | 1.00 | 35.69 | D |
| ATOM | 4335 | N | ILE | D | 107 | 89.298 | 80.445 | -0.109 | 1.00 | 38.83 | D |
| ATOM | 4336 | CA | ILE | D | 107 | 89.255 | 81.876 | -0.321 | 1.00 | 38.83 | D |
| ATOM | 4337 | CB | ILE | D | 107 | 90.227 | 82.575 | 0.644 | 1.00 | 32.55 | D |
| ATOM | 4338 | CG2 | ILE | D | 107 | 90.178 | 84.078 | 0.434 | 1.00 | 32.55 | D |
| ATOM | 4339 | CG1 | ILE | D | 107 | 89.869 | 82.200 | 2.087 | 1.00 | 32.55 | D |
| ATOM | 4340 | CD1 | ILE | D | 107 | 90.972 | 82.435 | 3.072 | 1.00 | 32.55 | D |
| ATOM | 4341 | C | ILE | D | 107 | 89.641 | 82.205 | -1.750 | 1.00 | 38.83 | D |
| ATOM | 4342 | O | ILE | D | 107 | 90.769 | 81.951 | -2.167 | 1.00 | 38.83 | D |
| ATOM | 4343 | N | ARG | D | 108 | 88.699 | 82.761 | -2.503 | 1.00 | 34.65 | D |
| ATOM | 4344 | CA | ARG | D | 108 | 88.964 | 83.125 | -3.882 | 1.00 | 34.65 | D |
| ATOM | 4345 | CB | ARG | D | 108 | 87.893 | 82.552 | -4.808 | 1.00 | 56.81 | D |
| ATOM | 4346 | CG | ARG | D | 108 | 88.035 | 83.065 | -6.222 | 1.00 | 56.81 | D |
| ATOM | 4347 | CD | ARG | D | 108 | 87.762 | 82.009 | -7.256 | 1.00 | 56.81 | D |
| ATOM | 4348 | NE | ARG | D | 108 | 86.366 | 81.976 | -7.662 | 1.00 | 56.81 | D |
| ATOM | 4349 | CZ | ARG | D | 108 | 85.963 | 81.744 | -8.909 | 1.00 | 56.81 | D |
| ATOM | 4350 | NH1 | ARG | D | 108 | 86.856 | 81.529 | -9.870 | 1.00 | 56.81 | D |
| ATOM | 4351 | NH2 | ARG | D | 108 | 84.667 | 81.728 | -9.197 | 1.00 | 56.81 | D |
| ATOM | 4352 | C | ARG | D | 108 | 89.041 | 84.636 | -4.090 | 1.00 | 34.65 | D |
| ATOM | 4353 | O | ARG | D | 108 | 88.171 | 85.386 | -3.631 | 1.00 | 34.65 | D |
| ATOM | 4354 | N | GLY | D | 109 | 90.088 | 85.081 | -4.786 | 1.00 | 42.88 | D |
| ATOM | 4355 | CA | GLY | D | 109 | 90.225 | 86.499 | -5.062 | 1.00 | 42.88 | D |
| ATOM | 4356 | C | GLY | D | 109 | 89.118 | 86.866 | -6.033 | 1.00 | 42.88 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|--------|---------|------|-------|---|
| ATOM | 4357 | O | GLY | D | 109 | 88.973 | 86.238 | -7.082 | 1.00 | 42.88 | D |
| ATOM | 4358 | N | VAL | D | 110 | 88.319 | 87.868 | -5.692 | 1.00 | 48.85 | D |
| ATOM | 4359 | CA | VAL | D | 110 | 87.232 | 88.263 | -6.567 | 1.00 | 48.85 | D |
| ATOM | 4360 | CB | VAL | D | 110 | 86.339 | 89.308 | -5.891 | 1.00 | 40.18 | D |
| ATOM | 4361 | CG1 | VAL | D | 110 | 85.258 | 89.771 | -6.852 | 1.00 | 40.18 | D |
| ATOM | 4362 | CG2 | VAL | D | 110 | 85.719 | 88.707 | -4.640 | 1.00 | 40.18 | D |
| ATOM | 4363 | C | VAL | D | 110 | 87.719 | 88.806 | -7.906 | 1.00 | 48.85 | D |
| ATOM | 4364 | O | VAL | D | 110 | 87.185 | 88.454 | -8.955 | 1.00 | 48.85 | D |
| ATOM | 4365 | N | ASP | D | 111 | 88.732 | 89.661 | -7.880 | 1.00 | 48.31 | D |
| ATOM | 4366 | CA | ASP | D | 111 | 89.242 | 90.222 | -9.118 | 1.00 | 48.31 | D |
| ATOM | 4367 | CB | ASP | D | 111 | 90.166 | 91.403 | -8.826 | 1.00 | 76.83 | D |
| ATOM | 4368 | CG | ASP | D | 111 | 90.454 | 92.234 | -10.061 | 1.00 | 76.83 | D |
| ATOM | 4369 | OD1 | ASP | D | 111 | 90.994 | 91.678 | -11.036 | 1.00 | 76.83 | D |
| ATOM | 4370 | OD2 | ASP | D | 111 | 90.139 | 93.441 | -10.060 | 1.00 | 76.83 | D |
| ATOM | 4371 | C | ASP | D | 111 | 89.996 | 89.158 | -9.908 | 1.00 | 48.31 | D |
| ATOM | 4372 | O | ASP | D | 111 | 89.596 | 88.798 | -11.009 | 1.00 | 48.31 | D |
| ATOM | 4373 | N | SER | D | 112 | 91.079 | 88.646 | -9.334 | 1.00 | 51.84 | D |
| ATOM | 4374 | CA | SER | D | 112 | 91.897 | 87.631 | -9.990 | 1.00 | 51.84 | D |
| ATOM | 4375 | CB | SER | D | 112 | 93.093 | 87.279 | -9.124 | 1.00 | 44.88 | D |
| ATOM | 4376 | OG | SER | D | 112 | 92.671 | 86.465 | -8.050 | 1.00 | 44.88 | D |
| ATOM | 4377 | C | SER | D | 112 | 91.153 | 86.347 | -10.293 | 1.00 | 51.84 | D |
| ATOM | 4378 | O | SER | D | 112 | 91.441 | 85.689 | -11.282 | 1.00 | 51.84 | D |
| ATOM | 4379 | N | GLY | D | 113 | 90.212 | 85.977 | -9.434 | 1.00 | 39.75 | D |
| ATOM | 4380 | CA | GLY | D | 113 | 89.465 | 84.750 | -9.648 | 1.00 | 39.75 | D |
| ATOM | 4381 | C | GLY | D | 113 | 90.252 | 83.541 | -9.163 | 1.00 | 39.75 | D |
| ATOM | 4382 | O | GLY | D | 113 | 89.817 | 82.403 | -9.324 | 1.00 | 39.75 | D |
| ATOM | 4383 | N | LEU | D | 114 | 91.409 | 83.779 | -8.555 | 1.00 | 43.32 | D |
| ATOM | 4384 | CA | LEU | D | 114 | 92.243 | 82.683 | -8.079 | 1.00 | 43.32 | D |
| ATOM | 4385 | CB | LEU | D | 114 | 93.732 | 83.028 | -8.265 | 1.00 | 37.81 | D |
| ATOM | 4386 | CG | LEU | D | 114 | 94.210 | 83.444 | -9.666 | 1.00 | 37.81 | D |
| ATOM | 4387 | CD1 | LEU | D | 114 | 95.642 | 83.932 | -9.567 | 1.00 | 37.81 | D |
| ATOM | 4388 | CD2 | LEU | D | 114 | 94.089 | 82.290 | -10.651 | 1.00 | 37.81 | D |
| ATOM | 4389 | C | LEU | D | 114 | 91.993 | 82.319 | -6.618 | 1.00 | 43.32 | D |
| ATOM | 4390 | O | LEU | D | 114 | 91.622 | 83.166 | -5.800 | 1.00 | 43.32 | D |
| ATOM | 4391 | N | TYR | D | 115 | 92.216 | 81.052 | -6.294 | 1.00 | 38.40 | D |
| ATOM | 4392 | CA | TYR | D | 115 | 92.033 | 80.572 | -4.937 | 1.00 | 38.40 | D |
| ATOM | 4393 | CB | TYR | D | 115 | 91.502 | 79.139 | -4.939 | 1.00 | 44.55 | D |
| ATOM | 4394 | CG | TYR | D | 115 | 90.193 | 78.971 | -5.669 | 1.00 | 44.55 | D |
| ATOM | 4395 | CD1 | TYR | D | 115 | 90.157 | 78.815 | -7.049 | 1.00 | 44.55 | D |
| ATOM | 4396 | CE1 | TYR | D | 115 | 88.949 | 78.657 | -7.717 | 1.00 | 44.55 | D |
| ATOM | 4397 | CD2 | TYR | D | 115 | 88.987 | 78.969 | -4.975 | 1.00 | 44.55 | D |
| ATOM | 4398 | CE2 | TYR | D | 115 | 87.774 | 78.812 | -5.630 | 1.00 | 44.55 | D |
| ATOM | 4399 | CZ | TYR | D | 115 | 87.759 | 78.655 | -6.997 | 1.00 | 44.55 | D |
| ATOM | 4400 | OH | TYR | D | 115 | 86.555 | 78.487 | -7.644 | 1.00 | 44.55 | D |
| ATOM | 4401 | C | TYR | D | 115 | 93.339 | 80.615 | -4.156 | 1.00 | 38.40 | D |
| ATOM | 4402 | O | TYR | D | 115 | 94.415 | 80.400 | -4.701 | 1.00 | 38.40 | D |
| ATOM | 4403 | N | LEU | D | 116 | 93.231 | 80.915 | -2.873 | 1.00 | 33.54 | D |
| ATOM | 4404 | CA | LEU | D | 116 | 94.385 | 80.955 | -2.013 | 1.00 | 33.54 | D |
| ATOM | 4405 | CB | LEU | D | 116 | 94.019 | 81.604 | -0.682 | 1.00 | 29.09 | D |
| ATOM | 4406 | CG | LEU | D | 116 | 95.118 | 81.572 | 0.375 | 1.00 | 29.09 | D |
| ATOM | 4407 | CD1 | LEU | D | 116 | 96.258 | 82.500 | -0.040 | 1.00 | 29.09 | D |
| ATOM | 4408 | CD2 | LEU | D | 116 | 94.549 | 81.999 | 1.717 | 1.00 | 29.09 | D |
| ATOM | 4409 | C | LEU | D | 116 | 94.787 | 79.508 | -1.778 | 1.00 | 33.54 | D |
| ATOM | 4410 | O | LEU | D | 116 | 93.942 | 78.654 | -1.496 | 1.00 | 33.54 | D |
| ATOM | 4411 | N | GLY | D | 117 | 96.077 | 79.226 | -1.898 | 1.00 | 37.70 | D |
| ATOM | 4412 | CA | GLY | D | 117 | 96.546 | 77.875 | -1.675 | 1.00 | 37.70 | D |
| ATOM | 4413 | C | GLY | D | 117 | 97.846 | 77.913 | -0.915 | 1.00 | 37.70 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 4414 | O | GLY | D | 117 | 98.467 | 78.967 | -0.780 | 1.00 | 37.70 | D |
| ATOM | 4415 | N | MET | D | 118 | 98.244 | 76.767 | -0.387 | 1.00 | 42.09 | D |
| ATOM | 4416 | CA | MET | D | 118 | 99.503 | 76.660 | 0.327 | 1.00 | 42.09 | D |
| ATOM | 4417 | CB | MET | D | 118 | 99.277 | 76.692 | 1.832 | 1.00 | 42.40 | D |
| ATOM | 4418 | CG | MET | D | 118 | 100.561 | 76.793 | 2.604 | 1.00 | 42.40 | D |
| ATOM | 4419 | SD | MET | D | 118 | 100.350 | 76.460 | 4.354 | 1.00 | 42.40 | D |
| ATOM | 4420 | CE | MET | D | 118 | 99.969 | 78.117 | 4.973 | 1.00 | 42.40 | D |
| ATOM | 4421 | C | MET | D | 118 | 100.127 | 75.328 | -0.086 | 1.00 | 42.09 | D |
| ATOM | 4422 | O | MET | D | 118 | 99.503 | 74.272 | 0.056 | 1.00 | 42.09 | D |
| ATOM | 4423 | N | ASN | D | 119 | 101.347 | 75.376 | -0.618 | 1.00 | 53.96 | D |
| ATOM | 4424 | CA | ASN | D | 119 | 102.014 | 74.153 | -1.051 | 1.00 | 53.96 | D |
| ATOM | 4425 | CB | ASN | D | 119 | 103.024 | 74.442 | -2.163 | 1.00 | 41.18 | D |
| ATOM | 4426 | CG | ASN | D | 119 | 104.117 | 75.402 | -1.737 | 1.00 | 41.18 | D |
| ATOM | 4427 | OD1 | ASN | D | 119 | 104.489 | 75.470 | -0.560 | 1.00 | 41.18 | D |
| ATOM | 4428 | ND2 | ASN | D | 119 | 104.655 | 76.141 | -2.702 | 1.00 | 41.18 | D |
| ATOM | 4429 | C | ASN | D | 119 | 102.704 | 73.455 | 0.106 | 1.00 | 53.96 | D |
| ATOM | 4430 | O | ASN | D | 119 | 102.711 | 73.963 | 1.226 | 1.00 | 53.96 | D |
| ATOM | 4431 | N | GLU | D | 120 | 103.286 | 72.292 | -0.178 | 1.00 | 63.37 | D |
| ATOM | 4432 | CA | GLU | D | 120 | 103.965 | 71.488 | 0.835 | 1.00 | 63.37 | D |
| ATOM | 4433 | CB | GLU | D | 120 | 104.493 | 70.192 | 0.214 | 1.00 | 82.96 | D |
| ATOM | 4434 | CG | GLU | D | 120 | 104.737 | 69.097 | 1.240 | 1.00 | 82.96 | D |
| ATOM | 4435 | CD | GLU | D | 120 | 104.925 | 67.722 | 0.621 | 1.00 | 82.96 | D |
| ATOM | 4436 | OE1 | GLU | D | 120 | 104.210 | 67.395 | -0.354 | 1.00 | 82.96 | D |
| ATOM | 4437 | OE2 | GLU | D | 120 | 105.775 | 66.959 | 1.128 | 1.00 | 82.96 | D |
| ATOM | 4438 | C | GLU | D | 120 | 105.094 | 72.230 | 1.541 | 1.00 | 63.37 | D |
| ATOM | 4439 | O | GLU | D | 120 | 105.503 | 71.844 | 2.638 | 1.00 | 63.37 | D |
| ATOM | 4440 | N | LYS | D | 121 | 105.602 | 73.289 | 0.915 | 1.00 | 52.24 | D |
| ATOM | 4441 | CA | LYS | D | 121 | 106.664 | 74.080 | 1.523 | 1.00 | 52.24 | D |
| ATOM | 4442 | CB | LYS | D | 121 | 107.547 | 74.744 | 0.466 | 1.00 | 65.90 | D |
| ATOM | 4443 | CG | LYS | D | 121 | 108.528 | 73.821 | -0.230 | 1.00 | 65.90 | D |
| ATOM | 4444 | CD | LYS | D | 121 | 109.721 | 74.625 | -0.735 | 1.00 | 65.90 | D |
| ATOM | 4445 | CE | LYS | D | 121 | 110.632 | 73.813 | -1.651 | 1.00 | 65.90 | D |
| ATOM | 4446 | NZ | LYS | D | 121 | 109.999 | 73.498 | -2.977 | 1.00 | 65.90 | D |
| ATOM | 4447 | C | LYS | D | 121 | 106.029 | 75.161 | 2.378 | 1.00 | 52.24 | D |
| ATOM | 4448 | O | LYS | D | 121 | 106.727 | 75.984 | 2.981 | 1.00 | 52.24 | D |
| ATOM | 4449 | N | GLY | D | 122 | 104.698 | 75.161 | 2.415 | 1.00 | 42.67 | D |
| ATOM | 4450 | CA | GLY | D | 122 | 103.974 | 76.145 | 3.197 | 1.00 | 42.67 | D |
| ATOM | 4451 | C | GLY | D | 122 | 103.935 | 77.517 | 2.558 | 1.00 | 42.67 | D |
| ATOM | 4452 | O | GLY | D | 122 | 103.812 | 78.514 | 3.252 | 1.00 | 42.67 | D |
| ATOM | 4453 | N | GLU | D | 123 | 104.024 | 77.572 | 1.233 | 1.00 | 47.74 | D |
| ATOM | 4454 | CA | GLU | D | 123 | 104.003 | 78.851 | 0.521 | 1.00 | 47.74 | D |
| ATOM | 4455 | CB | GLU | D | 123 | 105.048 | 78.858 | -0.609 | 1.00 | 70.94 | D |
| ATOM | 4456 | CG | GLU | D | 123 | 106.492 | 78.709 | -0.135 | 1.00 | 70.94 | D |
| ATOM | 4457 | CD | GLU | D | 123 | 107.503 | 78.706 | -1.280 | 1.00 | 70.94 | D |
| ATOM | 4458 | OE1 | GLU | D | 123 | 107.343 | 77.896 | -2.227 | 1.00 | 70.94 | D |
| ATOM | 4459 | OE2 | GLU | D | 123 | 108.460 | 79.511 | -1.222 | 1.00 | 70.94 | D |
| ATOM | 4460 | C | GLU | D | 123 | 102.626 | 79.161 | -0.051 | 1.00 | 47.74 | D |
| ATOM | 4461 | O | GLU | D | 123 | 101.985 | 78.310 | -0.674 | 1.00 | 47.74 | D |
| ATOM | 4462 | N | LEU | D | 124 | 102.188 | 80.395 | 0.164 | 1.00 | 42.34 | D |
| ATOM | 4463 | CA | LEU | D | 124 | 100.886 | 80.847 | -0.309 | 1.00 | 42.34 | D |
| ATOM | 4464 | CB | LEU | D | 124 | 100.442 | 82.088 | 0.471 | 1.00 | 32.52 | D |
| ATOM | 4465 | CG | LEU | D | 124 | 100.357 | 81.867 | 1.986 | 1.00 | 32.52 | D |
| ATOM | 4466 | CD1 | LEU | D | 124 | 100.065 | 83.181 | 2.704 | 1.00 | 32.52 | D |
| ATOM | 4467 | CD2 | LEU | D | 124 | 99.291 | 80.831 | 2.263 | 1.00 | 32.52 | D |
| ATOM | 4468 | C | LEU | D | 124 | 100.958 | 81.176 | -1.780 | 1.00 | 42.34 | D |
| ATOM | 4469 | O | LEU | D | 124 | 102.020 | 81.518 | -2.287 | 1.00 | 42.34 | D |
| ATOM | 4470 | N | TYR | D | 125 | 99.831 | 81.080 | -2.468 | 1.00 | 44.44 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|--------|---------|------|--------|---|
| ATOM | 4471 | CA | TYR | D | 125 | 99.820 | 81.392 | -3.882 | 1.00 | 44.44 | D |
| ATOM | 4472 | CB | TYR | D | 125 | 100.692 | 80.382 | -4.641 | 1.00 | 31.44 | D |
| ATOM | 4473 | CG | TYR | D | 125 | 100.120 | 78.977 | -4.693 | 1.00 | 31.44 | D |
| ATOM | 4474 | CD1 | TYR | D | 125 | 99.250 | 78.604 | -5.711 | 1.00 | 31.44 | D |
| ATOM | 4475 | CE1 | TYR | D | 125 | 98.683 | 77.338 | -5.744 | 1.00 | 31.44 | D |
| ATOM | 4476 | CD2 | TYR | D | 125 | 100.415 | 78.037 | -3.694 | 1.00 | 31.44 | D |
| ATOM | 4477 | CE2 | TYR | D | 125 | 99.842 | 76.760 | -3.716 | 1.00 | 31.44 | D |
| ATOM | 4478 | CZ | TYR | D | 125 | 98.978 | 76.423 | -4.748 | 1.00 | 31.44 | D |
| ATOM | 4479 | OH | TYR | D | 125 | 98.383 | 75.178 | -4.802 | 1.00 | 31.44 | D |
| ATOM | 4480 | C | TYR | D | 125 | 98.392 | 81.352 | -4.397 | 1.00 | 44.44 | D |
| ATOM | 4481 | O | TYR | D | 125 | 97.518 | 80.760 | -3.761 | 1.00 | 44.44 | D |
| ATOM | 4482 | N | GLY | D | 126 | 98.163 | 81.991 | -5.540 | 1.00 | 40.42 | D |
| ATOM | 4483 | CA | GLY | D | 126 | 96.843 | 82.000 | -6.134 | 1.00 | 40.42 | D |
| ATOM | 4484 | C | GLY | D | 126 | 96.752 | 80.814 | -7.064 | 1.00 | 40.42 | D |
| ATOM | 4485 | O | GLY | D | 126 | 97.617 | 80.632 | -7.914 | 1.00 | 40.42 | D |
| ATOM | 4486 | N | SER | D | 127 | 95.713 | 80.002 | -6.912 | 1.00 | 42.64 | D |
| ATOM | 4487 | CA | SER | D | 127 | 95.547 | 78.819 | -7.743 | 1.00 | 42.64 | D |
| ATOM | 4488 | CB | SER | D | 127 | 95.313 | 77.602 | -6.841 | 1.00 | 40.20 | D |
| ATOM | 4489 | OG | SER | D | 127 | 95.106 | 76.413 | -7.587 | 1.00 | 40.20 | D |
| ATOM | 4490 | C | SER | D | 127 | 94.399 | 78.969 | -8.746 | 1.00 | 42.64 | D |
| ATOM | 4491 | O | SER | D | 127 | 93.323 | 79.449 | -8.403 | 1.00 | 42.64 | D |
| ATOM | 4492 | N | GLU | D | 128 | 94.632 | 78.565 | -9.989 | 1.00 | 50.37 | D |
| ATOM | 4493 | CA | GLU | D | 128 | 93.598 | 78.647 | -11.015 | 1.00 | 50.37 | D |
| ATOM | 4494 | CB | GLU | D | 128 | 94.175 | 78.257 | -12.377 | 1.00 | 100.00 | D |
| ATOM | 4495 | CG | GLU | D | 128 | 93.173 | 78.296 | -13.522 | 1.00 | 100.00 | D |
| ATOM | 4496 | CD | GLU | D | 128 | 93.692 | 77.604 | -14.777 | 1.00 | 100.00 | D |
| ATOM | 4497 | OE1 | GLU | D | 128 | 93.858 | 76.363 | -14.754 | 1.00 | 100.00 | D |
| ATOM | 4498 | OE2 | GLU | D | 128 | 93.937 | 78.301 | -15.785 | 1.00 | 100.00 | D |
| ATOM | 4499 | C | GLU | D | 128 | 92.463 | 77.691 | -10.649 | 1.00 | 50.37 | D |
| ATOM | 4500 | O | GLU | D | 128 | 91.285 | 78.004 | -10.813 | 1.00 | 50.37 | D |
| ATOM | 4501 | N | LYS | D | 129 | 92.833 | 76.521 | -10.143 | 1.00 | 52.50 | D |
| ATOM | 4502 | CA | LYS | D | 129 | 91.856 | 75.514 | -9.764 | 1.00 | 52.50 | D |
| ATOM | 4503 | CB | LYS | D | 129 | 92.219 | 74.166 | -10.389 | 1.00 | 86.48 | D |
| ATOM | 4504 | CG | LYS | D | 129 | 92.266 | 74.186 | -11.903 | 1.00 | 86.48 | D |
| ATOM | 4505 | CD | LYS | D | 129 | 92.522 | 72.804 | -12.470 | 1.00 | 86.48 | D |
| ATOM | 4506 | CE | LYS | D | 129 | 92.682 | 72.859 | -13.980 | 1.00 | 86.48 | D |
| ATOM | 4507 | NZ | LYS | D | 129 | 91.497 | 73.480 | -14.631 | 1.00 | 86.48 | D |
| ATOM | 4508 | C | LYS | D | 129 | 91.747 | 75.356 | -8.258 | 1.00 | 52.50 | D |
| ATOM | 4509 | O | LYS | D | 129 | 92.703 | 75.592 | -7.520 | 1.00 | 52.50 | D |
| ATOM | 4510 | N | LEU | D | 130 | 90.561 | 74.967 | -7.811 | 1.00 | 37.77 | D |
| ATOM | 4511 | CA | LEU | D | 130 | 90.311 | 74.745 | -6.402 | 1.00 | 37.77 | D |
| ATOM | 4512 | CB | LEU | D | 130 | 88.810 | 74.832 | -6.126 | 1.00 | 43.69 | D |
| ATOM | 4513 | CG | LEU | D | 130 | 88.319 | 74.566 | -4.700 | 1.00 | 43.69 | D |
| ATOM | 4514 | CD1 | LEU | D | 130 | 89.028 | 75.484 | -3.726 | 1.00 | 43.69 | D |
| ATOM | 4515 | CD2 | LEU | D | 130 | 86.805 | 74.774 | -4.643 | 1.00 | 43.69 | D |
| ATOM | 4516 | C | LEU | D | 130 | 90.835 | 73.350 | -6.048 | 1.00 | 37.77 | D |
| ATOM | 4517 | O | LEU | D | 130 | 90.176 | 72.352 | -6.313 | 1.00 | 37.77 | D |
| ATOM | 4518 | N | THR | D | 131 | 92.021 | 73.281 | -5.456 | 1.00 | 44.53 | D |
| ATOM | 4519 | CA | THR | D | 131 | 92.595 | 71.990 | -5.091 | 1.00 | 44.53 | D |
| ATOM | 4520 | CB | THR | D | 131 | 94.065 | 71.866 | -5.572 | 1.00 | 45.27 | D |
| ATOM | 4521 | OG1 | THR | D | 131 | 94.933 | 72.596 | -4.688 | 1.00 | 45.27 | D |
| ATOM | 4522 | CG2 | THR | D | 131 | 94.204 | 72.424 | -6.980 | 1.00 | 45.27 | D |
| ATOM | 4523 | C | THR | D | 131 | 92.560 | 71.811 | -3.580 | 1.00 | 44.53 | D |
| ATOM | 4524 | O | THR | D | 131 | 92.086 | 72.683 | -2.852 | 1.00 | 44.53 | D |
| ATOM | 4525 | N | GLN | D | 132 | 93.070 | 70.682 | -3.108 | 1.00 | 49.31 | D |
| ATOM | 4526 | CA | GLN | D | 132 | 93.079 | 70.414 | -1.681 | 1.00 | 49.31 | D |
| ATOM | 4527 | CB | GLN | D | 132 | 93.493 | 68.971 | -1.416 | 1.00 | 49.07 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 4528 | CG | GLN | D | 132 | 92.605 | 67.957 | -2.092 | 1.00 | 49.07 | D |
| ATOM | 4529 | CD | GLN | D | 132 | 92.862 | 66.551 | -1.591 | 1.00 | 49.07 | D |
| ATOM | 4530 | OE1 | GLN | D | 132 | 92.377 | 65.575 | -2.165 | 1.00 | 49.07 | D |
| ATOM | 4531 | NE2 | GLN | D | 132 | 93.624 | 66.440 | -0.506 | 1.00 | 49.07 | D |
| ATOM | 4532 | C | GLN | D | 132 | 94.026 | 71.369 | -0.976 | 1.00 | 49.31 | D |
| ATOM | 4533 | O | GLN | D | 132 | 93.977 | 71.530 | 0.244 | 1.00 | 49.31 | D |
| ATOM | 4534 | N | GLU | D | 133 | 94.892 | 72.010 | -1.748 | 1.00 | 39.41 | D |
| ATOM | 4535 | CA | GLU | D | 133 | 95.828 | 72.950 | -1.156 | 1.00 | 39.41 | D |
| ATOM | 4536 | CB | GLU | D | 133 | 97.005 | 73.196 | -2.093 | 1.00 | 50.87 | D |
| ATOM | 4537 | CG | GLU | D | 133 | 97.725 | 71.948 | -2.514 | 1.00 | 50.87 | D |
| ATOM | 4538 | CD | GLU | D | 133 | 99.155 | 72.232 | -2.870 | 1.00 | 50.87 | D |
| ATOM | 4539 | OE1 | GLU | D | 133 | 99.407 | 73.240 | -3.560 | 1.00 | 50.87 | D |
| ATOM | 4540 | OE2 | GLU | D | 133 | 100.030 | 71.447 | -2.458 | 1.00 | 50.87 | D |
| ATOM | 4541 | C | GLU | D | 133 | 95.120 | 74.264 | -0.893 | 1.00 | 39.41 | D |
| ATOM | 4542 | O | GLU | D | 133 | 95.673 | 75.160 | -0.262 | 1.00 | 39.41 | D |
| ATOM | 4543 | N | CYS | D | 134 | 93.889 | 74.366 | -1.376 | 1.00 | 42.39 | D |
| ATOM | 4544 | CA | CYS | D | 134 | 93.111 | 75.585 | -1.222 | 1.00 | 42.39 | D |
| ATOM | 4545 | CB | CYS | D | 134 | 92.427 | 75.914 | -2.545 | 1.00 | 45.18 | D |
| ATOM | 4546 | SG | CYS | D | 134 | 93.588 | 75.980 | -3.909 | 1.00 | 45.18 | D |
| ATOM | 4547 | C | CYS | D | 134 | 92.071 | 75.509 | -0.113 | 1.00 | 42.39 | D |
| ATOM | 4548 | O | CYS | D | 134 | 91.186 | 76.352 | -0.027 | 1.00 | 42.39 | D |
| ATOM | 4549 | N | VAL | D | 135 | 92.186 | 74.505 | 0.741 | 1.00 | 38.89 | D |
| ATOM | 4550 | CA | VAL | D | 135 | 91.239 | 74.334 | 1.821 | 1.00 | 38.89 | D |
| ATOM | 4551 | CB | VAL | D | 135 | 90.637 | 72.926 | 1.781 | 1.00 | 29.51 | D |
| ATOM | 4552 | CG1 | VAL | D | 135 | 89.651 | 72.749 | 2.915 | 1.00 | 29.51 | D |
| ATOM | 4553 | CG2 | VAL | D | 135 | 89.960 | 72.703 | 0.441 | 1.00 | 29.51 | D |
| ATOM | 4554 | C | VAL | D | 135 | 91.922 | 74.573 | 3.156 | 1.00 | 38.89 | D |
| ATOM | 4555 | O | VAL | D | 135 | 92.879 | 73.877 | 3.514 | 1.00 | 38.89 | D |
| ATOM | 4556 | N | PHE | D | 136 | 91.427 | 75.558 | 3.899 | 1.00 | 32.74 | D |
| ATOM | 4557 | CA | PHE | D | 136 | 92.036 | 75.873 | 5.174 | 1.00 | 32.74 | D |
| ATOM | 4558 | CB | PHE | D | 136 | 92.561 | 77.312 | 5.158 | 1.00 | 37.72 | D |
| ATOM | 4559 | CG | PHE | D | 136 | 93.515 | 77.600 | 4.044 | 1.00 | 37.72 | D |
| ATOM | 4560 | CD1 | PHE | D | 136 | 93.051 | 77.807 | 2.751 | 1.00 | 37.72 | D |
| ATOM | 4561 | CD2 | PHE | D | 136 | 94.880 | 77.675 | 4.285 | 1.00 | 37.72 | D |
| ATOM | 4562 | CE1 | PHE | D | 136 | 93.933 | 78.089 | 1.713 | 1.00 | 37.72 | D |
| ATOM | 4563 | CE2 | PHE | D | 136 | 95.777 | 77.959 | 3.247 | 1.00 | 37.72 | D |
| ATOM | 4564 | CZ | PHE | D | 136 | 95.303 | 78.165 | 1.966 | 1.00 | 37.72 | D |
| ATOM | 4565 | C | PHE | D | 136 | 91.145 | 75.688 | 6.402 | 1.00 | 32.74 | D |
| ATOM | 4566 | O | PHE | D | 136 | 89.909 | 75.745 | 6.333 | 1.00 | 32.74 | D |
| ATOM | 4567 | N | ARG | D | 137 | 91.802 | 75.466 | 7.533 | 1.00 | 35.24 | D |
| ATOM | 4568 | CA | ARG | D | 137 | 91.120 | 75.313 | 8.799 | 1.00 | 35.24 | D |
| ATOM | 4569 | CB | ARG | D | 137 | 91.952 | 74.467 | 9.743 | 1.00 | 36.01 | D |
| ATOM | 4570 | CG | ARG | D | 137 | 92.142 | 73.053 | 9.297 | 1.00 | 36.01 | D |
| ATOM | 4571 | CD | ARG | D | 137 | 92.856 | 72.262 | 10.380 | 1.00 | 36.01 | D |
| ATOM | 4572 | NE | ARG | D | 137 | 92.976 | 70.852 | 10.024 | 1.00 | 36.01 | D |
| ATOM | 4573 | CZ | ARG | D | 137 | 93.439 | 69.917 | 10.842 | 1.00 | 36.01 | D |
| ATOM | 4574 | NH1 | ARG | D | 137 | 93.829 | 70.247 | 12.067 | 1.00 | 36.01 | D |
| ATOM | 4575 | NH2 | ARG | D | 137 | 93.500 | 68.658 | 10.438 | 1.00 | 36.01 | D |
| ATOM | 4576 | C | ARG | D | 137 | 90.975 | 76.710 | 9.382 | 1.00 | 35.24 | D |
| ATOM | 4577 | O | ARG | D | 137 | 91.974 | 77.364 | 9.713 | 1.00 | 35.24 | D |
| ATOM | 4578 | N | GLU | D | 138 | 89.730 | 77.172 | 9.479 | 1.00 | 34.60 | D |
| ATOM | 4579 | CA | GLU | D | 138 | 89.428 | 78.486 | 10.031 | 1.00 | 34.60 | D |
| ATOM | 4580 | CB | GLU | D | 138 | 88.292 | 79.141 | 9.238 | 1.00 | 37.71 | D |
| ATOM | 4581 | CG | GLU | D | 138 | 87.700 | 80.394 | 9.876 | 1.00 | 37.71 | D |
| ATOM | 4582 | CD | GLU | D | 138 | 86.586 | 80.978 | 9.038 | 1.00 | 37.71 | D |
| ATOM | 4583 | OE1 | GLU | D | 138 | 86.828 | 81.907 | 8.232 | 1.00 | 37.71 | D |
| ATOM | 4584 | OE2 | GLU | D | 138 | 85.449 | 80.488 | 9.172 | 1.00 | 37.71 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4585 | C | GLU | D | 138 | 89.009 | 78.269 | 11.478 | 1.00 | 34.60 | D |
| ATOM | 4586 | O | GLU | D | 138 | 88.023 | 77.593 | 11.756 | 1.00 | 34.60 | D |
| ATOM | 4587 | N | GLN | D | 139 | 89.764 | 78.837 | 12.402 | 1.00 | 42.07 | D |
| ATOM | 4588 | CA | GLN | D | 139 | 89.458 | 78.669 | 13.810 | 1.00 | 42.07 | D |
| ATOM | 4589 | CB | GLN | D | 139 | 90.325 | 77.558 | 14.404 | 1.00 | 27.07 | D |
| ATOM | 4590 | CG | GLN | D | 139 | 90.109 | 76.224 | 13.736 | 1.00 | 27.07 | D |
| ATOM | 4591 | CD | GLN | D | 139 | 91.081 | 75.172 | 14.201 | 1.00 | 27.07 | D |
| ATOM | 4592 | OE1 | GLN | D | 139 | 91.843 | 75.380 | 15.152 | 1.00 | 27.07 | D |
| ATOM | 4593 | NE2 | GLN | D | 139 | 91.060 | 74.023 | 13.535 | 1.00 | 27.07 | D |
| ATOM | 4594 | C | GLN | D | 139 | 89.662 | 79.954 | 14.579 | 1.00 | 42.07 | D |
| ATOM | 4595 | O | GLN | D | 139 | 90.679 | 80.633 | 14.435 | 1.00 | 42.07 | D |
| ATOM | 4596 | N | PHE | D | 140 | 88.670 | 80.281 | 15.393 | 1.00 | 32.04 | D |
| ATOM | 4597 | CA | PHE | D | 140 | 88.694 | 81.481 | 16.210 | 1.00 | 32.04 | D |
| ATOM | 4598 | CB | PHE | D | 140 | 87.542 | 81.430 | 17.211 | 1.00 | 27.68 | D |
| ATOM | 4599 | CG | PHE | D | 140 | 87.417 | 82.656 | 18.041 | 1.00 | 27.68 | D |
| ATOM | 4600 | CD1 | PHE | D | 140 | 86.624 | 83.721 | 17.612 | 1.00 | 27.68 | D |
| ATOM | 4601 | CD2 | PHE | D | 140 | 88.107 | 82.768 | 19.247 | 1.00 | 27.68 | D |
| ATOM | 4602 | CE1 | PHE | D | 140 | 86.515 | 84.880 | 18.376 | 1.00 | 27.68 | D |
| ATOM | 4603 | CE2 | PHE | D | 140 | 88.008 | 83.925 | 20.021 | 1.00 | 27.68 | D |
| ATOM | 4604 | CZ | PHE | D | 140 | 87.213 | 84.983 | 19.587 | 1.00 | 27.68 | D |
| ATOM | 4605 | C | PHE | D | 140 | 90.007 | 81.596 | 16.980 | 1.00 | 32.04 | D |
| ATOM | 4606 | O | PHE | D | 140 | 90.534 | 80.598 | 17.461 | 1.00 | 32.04 | D |
| ATOM | 4607 | N | GLU | D | 141 | 90.530 | 82.809 | 17.097 | 1.00 | 36.24 | D |
| ATOM | 4608 | CA | GLU | D | 141 | 91.755 | 83.020 | 17.854 | 1.00 | 36.24 | D |
| ATOM | 4609 | CB | GLU | D | 141 | 92.888 | 83.506 | 16.946 | 1.00 | 33.76 | D |
| ATOM | 4610 | CG | GLU | D | 141 | 94.185 | 83.848 | 17.695 | 1.00 | 33.76 | D |
| ATOM | 4611 | CD | GLU | D | 141 | 94.843 | 82.637 | 18.365 | 1.00 | 33.76 | D |
| ATOM | 4612 | OE1 | GLU | D | 141 | 94.561 | 81.488 | 17.962 | 1.00 | 33.76 | D |
| ATOM | 4613 | OE2 | GLU | D | 141 | 95.665 | 82.836 | 19.283 | 1.00 | 33.76 | D |
| ATOM | 4614 | C | GLU | D | 141 | 91.496 | 84.054 | 18.955 | 1.00 | 36.24 | D |
| ATOM | 4615 | O | GLU | D | 141 | 91.553 | 83.728 | 20.137 | 1.00 | 36.24 | D |
| ATOM | 4616 | N | GLU | D | 142 | 91.209 | 85.292 | 18.552 | 1.00 | 38.85 | D |
| ATOM | 4617 | CA | GLU | D | 142 | 90.935 | 86.379 | 19.486 | 1.00 | 38.85 | D |
| ATOM | 4618 | CB | GLU | D | 142 | 92.232 | 86.851 | 20.148 | 1.00 | 50.41 | D |
| ATOM | 4619 | CG | GLU | D | 142 | 93.399 | 87.107 | 19.191 | 1.00 | 50.41 | D |
| ATOM | 4620 | CD | GLU | D | 142 | 93.472 | 88.539 | 18.652 | 1.00 | 50.41 | D |
| ATOM | 4621 | OE1 | GLU | D | 142 | 92.822 | 89.443 | 19.231 | 1.00 | 50.41 | D |
| ATOM | 4622 | OE2 | GLU | D | 142 | 94.206 | 88.760 | 17.657 | 1.00 | 50.41 | D |
| ATOM | 4623 | C | GLU | D | 142 | 90.234 | 87.563 | 18.817 | 1.00 | 38.85 | D |
| ATOM | 4624 | O | GLU | D | 142 | 90.552 | 87.935 | 17.682 | 1.00 | 38.85 | D |
| ATOM | 4625 | N | ASN | D | 143 | 89.263 | 88.134 | 19.525 | 1.00 | 36.40 | D |
| ATOM | 4626 | CA | ASN | D | 143 | 88.507 | 89.283 | 19.035 | 1.00 | 36.40 | D |
| ATOM | 4627 | CB | ASN | D | 143 | 89.342 | 90.542 | 19.219 | 1.00 | 41.86 | D |
| ATOM | 4628 | CG | ASN | D | 143 | 89.700 | 90.769 | 20.675 | 1.00 | 41.86 | D |
| ATOM | 4629 | OD1 | ASN | D | 143 | 88.819 | 90.972 | 21.512 | 1.00 | 41.86 | D |
| ATOM | 4630 | ND2 | ASN | D | 143 | 90.988 | 90.710 | 20.991 | 1.00 | 41.86 | D |
| ATOM | 4631 | C | ASN | D | 143 | 88.028 | 89.154 | 17.597 | 1.00 | 36.40 | D |
| ATOM | 4632 | O | ASN | D | 143 | 88.022 | 90.118 | 16.832 | 1.00 | 36.40 | D |
| ATOM | 4633 | N | TRP | D | 144 | 87.611 | 87.941 | 17.254 | 1.00 | 38.51 | D |
| ATOM | 4634 | CA | TRP | D | 144 | 87.103 | 87.621 | 15.938 | 1.00 | 38.51 | D |
| ATOM | 4635 | CB | TRP | D | 144 | 85.967 | 88.584 | 15.570 | 1.00 | 36.09 | D |
| ATOM | 4636 | CG | TRP | D | 144 | 84.848 | 88.416 | 16.564 | 1.00 | 36.09 | D |
| ATOM | 4637 | CD2 | TRP | D | 144 | 84.101 | 87.212 | 16.814 | 1.00 | 36.09 | D |
| ATOM | 4638 | CE2 | TRP | D | 144 | 83.298 | 87.449 | 17.950 | 1.00 | 36.09 | D |
| ATOM | 4639 | CE3 | TRP | D | 144 | 84.040 | 85.954 | 16.189 | 1.00 | 36.09 | D |
| ATOM | 4640 | CD1 | TRP | D | 144 | 84.466 | 89.307 | 17.527 | 1.00 | 36.09 | D |
| ATOM | 4641 | NE1 | TRP | D | 144 | 83.544 | 88.734 | 18.362 | 1.00 | 36.09 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4642 | CZ2 | TRP | D | 144 | 82.439 | 86.469 | 18.486 | 1.00 | 36.09 | D |
| ATOM | 4643 | CZ3 | TRP | D | 144 | 83.186 | 84.974 | 16.723 | 1.00 | 36.09 | D |
| ATOM | 4644 | CH2 | TRP | D | 144 | 82.397 | 85.244 | 17.860 | 1.00 | 36.09 | D |
| ATOM | 4645 | C | TRP | D | 144 | 88.172 | 87.515 | 14.859 | 1.00 | 38.51 | D |
| ATOM | 4646 | O | TRP | D | 144 | 87.881 | 87.490 | 13.658 | 1.00 | 38.51 | D |
| ATOM | 4647 | N | TYR | D | 145 | 89.420 | 87.444 | 15.307 | 1.00 | 36.09 | D |
| ATOM | 4648 | CA | TYR | D | 145 | 90.530 | 87.217 | 14.395 | 1.00 | 36.09 | D |
| ATOM | 4649 | CB | TYR | D | 145 | 91.858 | 87.715 | 14.969 | 1.00 | 42.84 | D |
| ATOM | 4650 | CG | TYR | D | 145 | 92.185 | 89.152 | 14.679 | 1.00 | 42.84 | D |
| ATOM | 4651 | CD1 | TYR | D | 145 | 91.881 | 90.156 | 15.592 | 1.00 | 42.84 | D |
| ATOM | 4652 | CE1 | TYR | D | 145 | 92.208 | 91.475 | 15.326 | 1.00 | 42.84 | D |
| ATOM | 4653 | CD2 | TYR | D | 145 | 92.821 | 89.506 | 13.490 | 1.00 | 42.84 | D |
| ATOM | 4654 | CE2 | TYR | D | 145 | 93.153 | 90.821 | 13.211 | 1.00 | 42.84 | D |
| ATOM | 4655 | CZ | TYR | D | 145 | 92.846 | 91.801 | 14.130 | 1.00 | 42.84 | D |
| ATOM | 4656 | OH | TYR | D | 145 | 93.182 | 93.101 | 13.852 | 1.00 | 42.84 | D |
| ATOM | 4657 | C | TYR | D | 145 | 90.584 | 85.689 | 14.350 | 1.00 | 36.09 | D |
| ATOM | 4658 | O | TYR | D | 145 | 90.388 | 85.028 | 15.370 | 1.00 | 36.09 | D |
| ATOM | 4659 | N | ASN | D | 146 | 90.829 | 85.124 | 13.181 | 1.00 | 41.61 | D |
| ATOM | 4660 | CA | ASN | D | 146 | 90.916 | 83.679 | 13.076 | 1.00 | 41.61 | D |
| ATOM | 4661 | CB | ASN | D | 146 | 89.920 | 83.142 | 12.052 | 1.00 | 28.69 | D |
| ATOM | 4662 | CG | ASN | D | 146 | 88.497 | 83.479 | 12.383 | 1.00 | 28.69 | D |
| ATOM | 4663 | OD1 | ASN | D | 146 | 88.023 | 83.179 | 13.474 | 1.00 | 28.69 | D |
| ATOM | 4664 | ND2 | ASN | D | 146 | 87.794 | 84.088 | 11.434 | 1.00 | 28.69 | D |
| ATOM | 4665 | C | ASN | D | 146 | 92.305 | 83.325 | 12.587 | 1.00 | 41.61 | D |
| ATOM | 4666 | O | ASN | D | 146 | 93.051 | 84.187 | 12.121 | 1.00 | 41.61 | D |
| ATOM | 4667 | N | THR | D | 147 | 92.656 | 82.054 | 12.715 | 1.00 | 27.33 | D |
| ATOM | 4668 | CA | THR | D | 147 | 93.924 | 81.565 | 12.197 | 1.00 | 27.33 | D |
| ATOM | 4669 | CB | THR | D | 147 | 94.697 | 80.688 | 13.201 | 1.00 | 29.47 | D |
| ATOM | 4670 | OG1 | THR | D | 147 | 93.852 | 79.624 | 13.662 | 1.00 | 29.47 | D |
| ATOM | 4671 | CG2 | THR | D | 147 | 95.196 | 81.525 | 14.378 | 1.00 | 29.47 | D |
| ATOM | 4672 | C | THR | D | 147 | 93.459 | 80.685 | 11.062 | 1.00 | 27.33 | D |
| ATOM | 4673 | O | THR | D | 147 | 92.388 | 80.092 | 11.144 | 1.00 | 27.33 | D |
| ATOM | 4674 | N | TYR | D | 148 | 94.237 | 80.627 | 9.992 | 1.00 | 36.75 | D |
| ATOM | 4675 | CA | TYR | D | 148 | 93.901 | 79.786 | 8.851 | 1.00 | 36.75 | D |
| ATOM | 4676 | CB | TYR | D | 148 | 93.631 | 80.655 | 7.625 | 1.00 | 29.56 | D |
| ATOM | 4677 | CG | TYR | D | 148 | 92.384 | 81.486 | 7.772 | 1.00 | 29.56 | D |
| ATOM | 4678 | CD1 | TYR | D | 148 | 91.146 | 81.003 | 7.336 | 1.00 | 29.56 | D |
| ATOM | 4679 | CE1 | TYR | D | 148 | 89.975 | 81.704 | 7.570 | 1.00 | 29.56 | D |
| ATOM | 4680 | CD2 | TYR | D | 148 | 92.418 | 82.712 | 8.443 | 1.00 | 29.56 | D |
| ATOM | 4681 | CE2 | TYR | D | 148 | 91.251 | 83.431 | 8.689 | 1.00 | 29.56 | D |
| ATOM | 4682 | CZ | TYR | D | 148 | 90.031 | 82.919 | 8.255 | 1.00 | 29.56 | D |
| ATOM | 4683 | OH | TYR | D | 148 | 88.873 | 83.599 | 8.544 | 1.00 | 29.56 | D |
| ATOM | 4684 | C | TYR | D | 148 | 95.096 | 78.877 | 8.619 | 1.00 | 36.75 | D |
| ATOM | 4685 | O | TYR | D | 148 | 96.212 | 79.354 | 8.405 | 1.00 | 36.75 | D |
| ATOM | 4686 | N | SER | D | 149 | 94.877 | 77.569 | 8.699 | 1.00 | 36.92 | D |
| ATOM | 4687 | CA | SER | D | 149 | 95.967 | 76.631 | 8.487 | 1.00 | 36.92 | D |
| ATOM | 4688 | CB | SER | D | 149 | 96.349 | 75.930 | 9.792 | 1.00 | 29.65 | D |
| ATOM | 4689 | OG | SER | D | 149 | 95.338 | 75.033 | 10.215 | 1.00 | 29.65 | D |
| ATOM | 4690 | C | SER | D | 149 | 95.624 | 75.589 | 7.435 | 1.00 | 36.92 | D |
| ATOM | 4691 | O | SER | D | 149 | 94.444 | 75.277 | 7.207 | 1.00 | 36.92 | D |
| ATOM | 4692 | N | SER | D | 150 | 96.670 | 75.065 | 6.787 | 1.00 | 36.62 | D |
| ATOM | 4693 | CA | SER | D | 150 | 96.524 | 74.047 | 5.753 | 1.00 | 36.62 | D |
| ATOM | 4694 | CB | SER | D | 150 | 97.898 | 73.616 | 5.215 | 1.00 | 33.82 | D |
| ATOM | 4695 | OG | SER | D | 150 | 97.794 | 72.495 | 4.340 | 1.00 | 33.82 | D |
| ATOM | 4696 | C | SER | D | 150 | 95.839 | 72.837 | 6.346 | 1.00 | 36.62 | D |
| ATOM | 4697 | O | SER | D | 150 | 96.202 | 72.381 | 7.433 | 1.00 | 36.62 | D |
| ATOM | 4698 | N | ASN | D | 151 | 94.846 | 72.317 | 5.638 | 1.00 | 34.37 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|--------|-------|------|-------|---|
| ATOM | 4699 | CA | ASN | D | 151 | 94.156 | 71.132 | 6.117 | 1.00 | 34.37 | D |
| ATOM | 4700 | CB | ASN | D | 151 | 92.671 | 71.210 | 5.760 | 1.00 | 31.60 | D |
| ATOM | 4701 | CG | ASN | D | 151 | 91.849 | 70.124 | 6.432 | 1.00 | 31.60 | D |
| ATOM | 4702 | OD1 | ASN | D | 151 | 91.924 | 69.942 | 7.644 | 1.00 | 31.60 | D |
| ATOM | 4703 | ND2 | ASN | D | 151 | 91.049 | 69.406 | 5.645 | 1.00 | 31.60 | D |
| ATOM | 4704 | C | ASN | D | 151 | 94.814 | 69.918 | 5.451 | 1.00 | 34.37 | D |
| ATOM | 4705 | O | ASN | D | 151 | 94.351 | 68.794 | 5.579 | 1.00 | 34.37 | D |
| ATOM | 4706 | N | LEU | D | 152 | 95.924 | 70.164 | 4.762 | 1.00 | 46.72 | D |
| ATOM | 4707 | CA | LEU | D | 152 | 96.646 | 69.124 | 4.041 | 1.00 | 46.72 | D |
| ATOM | 4708 | CB | LEU | D | 152 | 96.731 | 69.511 | 2.569 | 1.00 | 49.63 | D |
| ATOM | 4709 | CG | LEU | D | 152 | 97.437 | 68.610 | 1.563 | 1.00 | 49.63 | D |
| ATOM | 4710 | CD1 | LEU | D | 152 | 96.736 | 67.264 | 1.461 | 1.00 | 49.63 | D |
| ATOM | 4711 | CD2 | LEU | D | 152 | 97.418 | 69.312 | 0.209 | 1.00 | 49.63 | D |
| ATOM | 4712 | C | LEU | D | 152 | 98.047 | 68.869 | 4.571 | 1.00 | 46.72 | D |
| ATOM | 4713 | O | LEU | D | 152 | 98.440 | 67.723 | 4.765 | 1.00 | 46.72 | D |
| ATOM | 4714 | N | TYR | D | 153 | 98.796 | 69.939 | 4.805 | 1.00 | 41.01 | D |
| ATOM | 4715 | CA | TYR | D | 153 | 100.162 | 69.827 | 5.294 | 1.00 | 41.01 | D |
| ATOM | 4716 | CB | TYR | D | 153 | 101.097 | 70.661 | 4.422 | 1.00 | 48.93 | D |
| ATOM | 4717 | CG | TYR | D | 153 | 100.974 | 70.372 | 2.948 | 1.00 | 48.93 | D |
| ATOM | 4718 | CD1 | TYR | D | 153 | 101.126 | 69.075 | 2.462 | 1.00 | 48.93 | D |
| ATOM | 4719 | CE1 | TYR | D | 153 | 101.034 | 68.799 | 1.107 | 1.00 | 48.93 | D |
| ATOM | 4720 | CD2 | TYR | D | 153 | 100.723 | 71.393 | 2.039 | 1.00 | 48.93 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 4721 | CE2 | TYR | D | 153 | 100.628 | 71.132 | 0.679 | 1.00 | 48.93 | D |
| ATOM | 4722 | CZ | TYR | D | 153 | 100.786 | 69.831 | 0.221 | 1.00 | 48.93 | D |
| ATOM | 4723 | OH | TYR | D | 153 | 100.692 | 69.563 | -1.120 | 1.00 | 48.93 | D |
| ATOM | 4724 | C | TYR | D | 153 | 100.281 | 70.293 | 6.731 | 1.00 | 41.01 | D |
| ATOM | 4725 | O | TYR | D | 153 | 99.521 | 71.147 | 7.172 | 1.00 | 41.01 | D |
| ATOM | 4726 | N | LYS | D | 154 | 101.257 | 69.746 | 7.447 | 1.00 | 42.63 | D |
| ATOM | 4727 | CA | LYS | D | 154 | 101.481 | 70.091 | 8.847 | 1.00 | 42.63 | D |
| ATOM | 4728 | CB | LYS | D | 154 | 100.459 | 69.372 | 9.723 | 1.00 | 57.88 | D |
| ATOM | 4729 | CG | LYS | D | 154 | 100.563 | 67.863 | 9.591 | 1.00 | 57.88 | D |
| ATOM | 4730 | CD | LYS | D | 154 | 99.811 | 67.136 | 10.672 | 1.00 | 57.88 | D |
| ATOM | 4731 | CE | LYS | D | 154 | 99.973 | 65.637 | 10.508 | 1.00 | 57.88 | D |
| ATOM | 4732 | NZ | LYS | D | 154 | 99.252 | 64.884 | 11.569 | 1.00 | 57.88 | D |
| ATOM | 4733 | C | LYS | D | 154 | 102.874 | 69.639 | 9.275 | 1.00 | 42.63 | D |
| ATOM | 4734 | O | LYS | D | 154 | 103.590 | 69.019 | 8.499 | 1.00 | 42.63 | D |
| ATOM | 4735 | N | HIS | D | 155 | 103.250 | 69.957 | 10.509 | 1.00 | 50.32 | D |
| ATOM | 4736 | CA | HIS | D | 155 | 104.532 | 69.527 | 11.052 | 1.00 | 50.32 | D |
| ATOM | 4737 | CB | HIS | D | 155 | 104.940 | 70.389 | 12.247 | 1.00 | 44.66 | D |
| ATOM | 4738 | CG | HIS | D | 155 | 105.301 | 71.794 | 11.879 | 1.00 | 44.66 | D |
| ATOM | 4739 | CD2 | HIS | D | 155 | 104.641 | 72.963 | 12.061 | 1.00 | 44.66 | D |
| ATOM | 4740 | ND1 | HIS | D | 155 | 106.468 | 72.114 | 11.219 | 1.00 | 44.66 | D |
| ATOM | 4741 | CE1 | HIS | D | 155 | 106.512 | 73.418 | 11.011 | 1.00 | 44.66 | D |
| ATOM | 4742 | NE2 | HIS | D | 155 | 105.414 | 73.956 | 11.512 | 1.00 | 44.66 | D |
| ATOM | 4743 | C | HIS | D | 155 | 104.294 | 68.098 | 11.509 | 1.00 | 50.32 | D |
| ATOM | 4744 | O | HIS | D | 155 | 103.606 | 67.864 | 12.499 | 1.00 | 50.32 | D |
| ATOM | 4745 | N | VAL | D | 156 | 104.855 | 67.143 | 10.778 | 1.00 | 43.97 | D |
| ATOM | 4746 | CA | VAL | D | 156 | 104.680 | 65.735 | 11.093 | 1.00 | 43.97 | D |
| ATOM | 4747 | CB | VAL | D | 156 | 105.289 | 64.870 | 9.973 | 1.00 | 43.29 | D |
| ATOM | 4748 | CG1 | VAL | D | 156 | 105.313 | 63.419 | 10.377 | 1.00 | 43.29 | D |
| ATOM | 4749 | CG2 | VAL | D | 156 | 104.480 | 65.053 | 8.689 | 1.00 | 43.29 | D |
| ATOM | 4750 | C | VAL | D | 156 | 105.254 | 65.307 | 12.441 | 1.00 | 43.97 | D |
| ATOM | 4751 | O | VAL | D | 156 | 104.805 | 64.321 | 13.030 | 1.00 | 43.97 | D |
| ATOM | 4752 | N | ASP | D | 157 | 106.231 | 66.044 | 12.952 | 1.00 | 44.60 | D |
| ATOM | 4753 | CA | ASP | D | 157 | 106.819 | 65.655 | 14.223 | 1.00 | 44.60 | D |
| ATOM | 4754 | CB | ASP | D | 157 | 108.302 | 66.046 | 14.260 | 1.00 | 41.65 | D |
| ATOM | 4755 | CG | ASP | D | 157 | 108.526 | 67.524 | 14.041 | 1.00 | 41.65 | D |
| ATOM | 4756 | OD1 | ASP | D | 157 | 107.612 | 68.192 | 13.513 | 1.00 | 41.65 | D |
| ATOM | 4757 | OD2 | ASP | D | 157 | 109.627 | 68.013 | 14.383 | 1.00 | 41.65 | D |
| ATOM | 4758 | C | ASP | D | 157 | 106.096 | 66.171 | 15.464 | 1.00 | 44.60 | D |
| ATOM | 4759 | O | ASP | D | 157 | 106.047 | 65.477 | 16.485 | 1.00 | 44.60 | D |
| ATOM | 4760 | N | THR | D | 158 | 105.524 | 67.370 | 15.390 | 1.00 | 49.07 | D |
| ATOM | 4761 | CA | THR | D | 158 | 104.822 | 67.920 | 16.548 | 1.00 | 49.07 | D |
| ATOM | 4762 | CB | THR | D | 158 | 105.238 | 69.367 | 16.845 | 1.00 | 39.02 | D |
| ATOM | 4763 | OG1 | THR | D | 158 | 104.887 | 70.201 | 15.732 | 1.00 | 39.02 | D |
| ATOM | 4764 | CG2 | THR | D | 158 | 106.734 | 69.449 | 17.114 | 1.00 | 39.02 | D |
| ATOM | 4765 | C | THR | D | 158 | 103.315 | 67.912 | 16.389 | 1.00 | 49.07 | D |
| ATOM | 4766 | O | THR | D | 158 | 102.580 | 68.039 | 17.369 | 1.00 | 49.07 | D |
| ATOM | 4767 | N | GLY | D | 159 | 102.852 | 67.746 | 15.158 | 1.00 | 35.78 | D |
| ATOM | 4768 | CA | GLY | D | 159 | 101.423 | 67.765 | 14.922 | 1.00 | 35.78 | D |
| ATOM | 4769 | C | GLY | D | 159 | 100.973 | 69.202 | 14.690 | 1.00 | 35.78 | D |
| ATOM | 4770 | O | GLY | D | 159 | 99.835 | 69.439 | 14.298 | 1.00 | 35.78 | D |
| ATOM | 4771 | N | ARG | D | 160 | 101.869 | 70.160 | 14.929 | 1.00 | 42.00 | D |
| ATOM | 4772 | CA | ARG | D | 160 | 101.569 | 71.580 | 14.733 | 1.00 | 42.00 | D |
| ATOM | 4773 | CB | ARG | D | 160 | 102.774 | 72.438 | 15.102 | 1.00 | 74.75 | D |
| ATOM | 4774 | CG | ARG | D | 160 | 102.630 | 73.177 | 16.416 | 1.00 | 74.75 | D |
| ATOM | 4775 | CD | ARG | D | 160 | 102.680 | 72.248 | 17.613 | 1.00 | 74.75 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 4776 | NE | ARG | D | 160 | 102.481 | 72.982 | 18.862 | 1.00 | 74.75 | D |
| ATOM | 4777 | CZ | ARG | D | 160 | 103.198 | 74.042 | 19.234 | 1.00 | 74.75 | D |
| ATOM | 4778 | NH1 | ARG | D | 160 | 104.171 | 74.504 | 18.459 | 1.00 | 74.75 | D |
| ATOM | 4779 | NH2 | ARG | D | 160 | 102.937 | 74.650 | 20.385 | 1.00 | 74.75 | D |
| ATOM | 4780 | C | ARG | D | 160 | 101.148 | 71.901 | 13.301 | 1.00 | 42.00 | D |
| ATOM | 4781 | O | ARG | D | 160 | 101.535 | 71.225 | 12.345 | 1.00 | 42.00 | D |
| ATOM | 4782 | N | ARG | D | 161 | 100.375 | 72.966 | 13.153 | 1.00 | 37.30 | D |
| ATOM | 4783 | CA | ARG | D | 161 | 99.855 | 73.354 | 11.849 | 1.00 | 37.30 | D |
| ATOM | 4784 | CB | ARG | D | 161 | 98.435 | 73.858 | 12.050 | 1.00 | 42.99 | D |
| ATOM | 4785 | CG | ARG | D | 161 | 97.527 | 72.746 | 12.508 | 1.00 | 42.99 | D |
| ATOM | 4786 | CD | ARG | D | 161 | 97.188 | 71.971 | 11.284 | 1.00 | 42.99 | D |
| ATOM | 4787 | NE | ARG | D | 161 | 97.062 | 70.547 | 11.492 | 1.00 | 42.99 | D |
| ATOM | 4788 | CZ | ARG | D | 161 | 96.793 | 69.696 | 10.510 | 1.00 | 42.99 | D |
| ATOM | 4789 | NH1 | ARG | D | 161 | 96.628 | 70.137 | 9.270 | 1.00 | 42.99 | D |
| ATOM | 4790 | NH2 | ARG | D | 161 | 96.692 | 68.404 | 10.769 | 1.00 | 42.99 | D |
| ATOM | 4791 | C | ARG | D | 161 | 100.660 | 74.358 | 11.047 | 1.00 | 37.30 | D |
| ATOM | 4792 | O | ARG | D | 161 | 101.588 | 74.976 | 11.555 | 1.00 | 37.30 | D |
| ATOM | 4793 | N | TYR | D | 162 | 100.302 | 74.487 | 9.774 | 1.00 | 40.61 | D |
| ATOM | 4794 | CA | TYR | D | 162 | 100.932 | 75.436 | 8.856 | 1.00 | 40.61 | D |
| ATOM | 4795 | CB | TYR | D | 162 | 101.105 | 74.827 | 7.464 | 1.00 | 51.48 | D |
| ATOM | 4796 | CG | TYR | D | 162 | 102.277 | 73.905 | 7.273 | 1.00 | 51.48 | D |
| ATOM | 4797 | CD1 | TYR | D | 162 | 103.022 | 73.441 | 8.353 | 1.00 | 51.48 | D |
| ATOM | 4798 | CE1 | TYR | D | 162 | 104.081 | 72.564 | 8.164 | 1.00 | 51.48 | D |
| ATOM | 4799 | CD2 | TYR | D | 162 | 102.620 | 73.471 | 5.999 | 1.00 | 51.48 | D |
| ATOM | 4800 | CE2 | TYR | D | 162 | 103.670 | 72.594 | 5.794 | 1.00 | 51.48 | D |
| ATOM | 4801 | CZ | TYR | D | 162 | 104.398 | 72.142 | 6.876 | 1.00 | 51.48 | D |
| ATOM | 4802 | OH | TYR | D | 162 | 105.438 | 71.272 | 6.665 | 1.00 | 51.48 | D |
| ATOM | 4803 | C | TYR | D | 162 | 99.946 | 76.589 | 8.728 | 1.00 | 40.61 | D |
| ATOM | 4804 | O | TYR | D | 162 | 98.896 | 76.437 | 8.087 | 1.00 | 40.61 | D |
| ATOM | 4805 | N | TYR | D | 163 | 100.272 | 77.739 | 9.307 | 1.00 | 49.07 | D |
| ATOM | 4806 | CA | TYR | D | 163 | 99.362 | 78.874 | 9.249 | 1.00 | 49.07 | D |
| ATOM | 4807 | CB | TYR | D | 163 | 99.312 | 79.590 | 10.601 | 1.00 | 39.23 | D |
| ATOM | 4808 | CG | TYR | D | 163 | 98.743 | 78.731 | 11.698 | 1.00 | 39.23 | D |
| ATOM | 4809 | CD1 | TYR | D | 163 | 99.548 | 77.825 | 12.389 | 1.00 | 39.23 | D |
| ATOM | 4810 | CE1 | TYR | D | 163 | 99.019 | 76.986 | 13.358 | 1.00 | 39.23 | D |
| ATOM | 4811 | CD2 | TYR | D | 163 | 97.387 | 78.777 | 12.007 | 1.00 | 39.23 | D |
| ATOM | 4812 | CE2 | TYR | D | 163 | 96.849 | 77.942 | 12.970 | 1.00 | 39.23 | D |
| ATOM | 4813 | CZ | TYR | D | 163 | 97.670 | 77.047 | 13.643 | 1.00 | 39.23 | D |
| ATOM | 4814 | OH | TYR | D | 163 | 97.132 | 76.210 | 14.585 | 1.00 | 39.23 | D |
| ATOM | 4815 | C | TYR | D | 163 | 99.624 | 79.908 | 8.185 | 1.00 | 49.07 | D |
| ATOM | 4816 | O | TYR | D | 163 | 100.768 | 80.209 | 7.852 | 1.00 | 49.07 | D |
| ATOM | 4817 | N | VAL | D | 164 | 98.536 | 80.447 | 7.647 | 1.00 | 34.49 | D |
| ATOM | 4818 | CA | VAL | D | 164 | 98.625 | 81.511 | 6.673 | 1.00 | 34.49 | D |
| ATOM | 4819 | CB | VAL | D | 164 | 97.243 | 81.855 | 6.112 | 1.00 | 30.21 | D |
| ATOM | 4820 | CG1 | VAL | D | 164 | 97.335 | 83.106 | 5.226 | 1.00 | 30.21 | D |
| ATOM | 4821 | CG2 | VAL | D | 164 | 96.693 | 80.667 | 5.326 | 1.00 | 30.21 | D |
| ATOM | 4822 | C | VAL | D | 164 | 99.152 | 82.700 | 7.481 | 1.00 | 34.49 | D |
| ATOM | 4823 | O | VAL | D | 164 | 98.739 | 82.911 | 8.628 | 1.00 | 34.49 | D |
| ATOM | 4824 | N | ALA | D | 165 | 100.070 | 83.470 | 6.912 | 1.00 | 36.68 | D |
| ATOM | 4825 | CA | ALA | D | 165 | 100.598 | 84.603 | 7.650 | 1.00 | 36.68 | D |
| ATOM | 4826 | CB | ALA | D | 165 | 101.591 | 84.118 | 8.711 | 1.00 | 25.46 | D |
| ATOM | 4827 | C | ALA | D | 165 | 101.246 | 85.657 | 6.773 | 1.00 | 36.68 | D |
| ATOM | 4828 | O | ALA | D | 165 | 101.759 | 85.354 | 5.695 | 1.00 | 36.68 | D |
| ATOM | 4829 | N | LEU | D | 166 | 101.193 | 86.900 | 7.245 | 1.00 | 47.49 | D |
| ATOM | 4830 | CA | LEU | D | 166 | 101.781 | 88.038 | 6.554 | 1.00 | 47.49 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 ~~Continued~~

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 4831 | CB | LEU | D | 166 | 100.703 | 89.026 | 6.115 | 1.00 | 42.29 | D |
| ATOM | 4832 | CG | LEU | D | 166 | 99.750 | 88.578 | 5.007 | 1.00 | 42.29 | D |
| ATOM | 4833 | CD1 | LEU | D | 166 | 98.717 | 89.667 | 4.751 | 1.00 | 42.29 | D |
| ATOM | 4834 | CD2 | LEU | D | 166 | 100.534 | 88.293 | 3.747 | 1.00 | 42.29 | D |
| ATOM | 4835 | C | LEU | D | 166 | 102.719 | 88.722 | 7.533 | 1.00 | 47.49 | D |
| ATOM | 4836 | O | LEU | D | 166 | 102.286 | 89.162 | 8.599 | 1.00 | 47.49 | D |
| ATOM | 4837 | N | ASN | D | 167 | 103.998 | 88.814 | 7.163 | 1.00 | 41.94 | D |
| ATOM | 4838 | CA | ASN | D | 167 | 105.019 | 89.428 | 8.010 | 1.00 | 41.94 | D |
| ATOM | 4839 | CB | ASN | D | 167 | 106.375 | 89.352 | 7.313 | 1.00 | 42.59 | D |
| ATOM | 4840 | CG | ASN | D | 167 | 106.905 | 87.949 | 7.238 | 1.00 | 42.59 | D |
| ATOM | 4841 | OD1 | ASN | D | 167 | 107.080 | 87.287 | 8.263 | 1.00 | 42.59 | D |
| ATOM | 4842 | ND2 | ASN | D | 167 | 107.165 | 87.477 | 6.022 | 1.00 | 42.59 | D |
| ATOM | 4843 | C | ASN | D | 167 | 104.750 | 90.877 | 8.410 | 1.00 | 41.94 | D |
| ATOM | 4844 | O | ASN | D | 167 | 103.899 | 91.555 | 7.816 | 1.00 | 41.94 | D |
| ATOM | 4845 | N | LYS | D | 168 | 105.493 | 91.347 | 9.413 | 1.00 | 58.07 | D |
| ATOM | 4846 | CA | LYS | D | 168 | 105.353 | 92.717 | 9.894 | 1.00 | 58.07 | D |
| ATOM | 4847 | CB | LYS | D | 168 | 106.375 | 93.018 | 10.991 | 1.00 | 82.27 | D |
| ATOM | 4848 | CG | LYS | D | 168 | 106.063 | 92.336 | 12.309 | 1.00 | 82.27 | D |
| ATOM | 4849 | CD | LYS | D | 168 | 106.782 | 92.994 | 13.486 | 1.00 | 82.27 | D |
| ATOM | 4850 | CE | LYS | D | 168 | 106.294 | 92.420 | 14.822 | 1.00 | 82.27 | D |
| ATOM | 4851 | NZ | LYS | D | 168 | 106.876 | 93.110 | 16.017 | 1.00 | 82.27 | D |
| ATOM | 4852 | C | LYS | D | 168 | 105.514 | 93.713 | 8.755 | 1.00 | 58.07 | D |
| ATOM | 4853 | O | LYS | D | 168 | 105.024 | 94.836 | 8.836 | 1.00 | 58.07 | D |
| ATOM | 4854 | N | ASP | D | 169 | 106.184 | 93.298 | 7.686 | 1.00 | 46.94 | D |
| ATOM | 4855 | CA | ASP | D | 169 | 106.387 | 94.175 | 6.545 | 1.00 | 46.94 | D |
| ATOM | 4856 | CB | ASP | D | 169 | 107.816 | 94.036 | 6.028 | 1.00 | 66.59 | D |
| ATOM | 4857 | CG | ASP | D | 169 | 108.050 | 92.728 | 5.323 | 1.00 | 66.59 | D |
| ATOM | 4858 | OD1 | ASP | D | 169 | 107.378 | 91.737 | 5.673 | 1.00 | 66.59 | D |
| ATOM | 4859 | OD2 | ASP | D | 169 | 108.913 | 92.687 | 4.424 | 1.00 | 66.59 | D |
| ATOM | 4860 | C | ASP | D | 169 | 105.389 | 93.899 | 5.420 | 1.00 | 46.94 | D |
| ATOM | 4861 | O | ASP | D | 169 | 105.536 | 94.417 | 4.311 | 1.00 | 46.94 | D |
| ATOM | 4862 | N | GLY | D | 170 | 104.381 | 93.075 | 5.704 | 1.00 | 46.92 | D |
| ATOM | 4863 | CA | GLY | D | 170 | 103.355 | 92.788 | 4.713 | 1.00 | 46.92 | D |
| ATOM | 4864 | C | GLY | D | 170 | 103.666 | 91.757 | 3.644 | 1.00 | 46.92 | D |
| ATOM | 4865 | O | GLY | D | 170 | 102.911 | 91.595 | 2.687 | 1.00 | 46.92 | D |
| ATOM | 4866 | N | THR | D | 171 | 104.775 | 91.052 | 3.790 | 1.00 | 38.32 | D |
| ATOM | 4867 | CA | THR | D | 171 | 105.124 | 90.039 | 2.809 | 1.00 | 38.32 | D |
| ATOM | 4868 | CB | THR | D | 171 | 106.651 | 89.942 | 2.637 | 1.00 | 38.90 | D |
| ATOM | 4869 | OG1 | THR | D | 171 | 107.246 | 89.498 | 3.864 | 1.00 | 38.90 | D |
| ATOM | 4870 | CG2 | THR | D | 171 | 107.225 | 91.297 | 2.289 | 1.00 | 38.90 | D |
| ATOM | 4871 | C | THR | D | 171 | 104.597 | 88.695 | 3.293 | 1.00 | 38.32 | D |
| ATOM | 4872 | O | THR | D | 171 | 104.460 | 88.471 | 4.498 | 1.00 | 38.32 | D |
| ATOM | 4873 | N | PRO | D | 172 | 104.266 | 87.791 | 2.360 | 1.00 | 44.57 | D |
| ATOM | 4874 | CD | PRO | D | 172 | 104.212 | 87.944 | 0.896 | 1.00 | 46.31 | D |
| ATOM | 4875 | CA | PRO | D | 172 | 103.765 | 86.478 | 2.767 | 1.00 | 44.57 | D |
| ATOM | 4876 | CB | PRO | D | 172 | 103.349 | 85.844 | 1.444 | 1.00 | 46.31 | D |
| ATOM | 4877 | CG | PRO | D | 172 | 104.247 | 86.516 | 0.437 | 1.00 | 46.31 | D |
| ATOM | 4878 | C | PRO | D | 172 | 104.867 | 85.698 | 3.475 | 1.00 | 44.57 | D |
| ATOM | 4879 | O | PRO | D | 172 | 106.020 | 85.732 | 3.057 | 1.00 | 44.57 | D |
| ATOM | 4880 | N | ARG | D | 173 | 104.515 | 85.017 | 4.558 | 1.00 | 37.48 | D |
| ATOM | 4881 | CA | ARG | D | 173 | 105.473 | 84.229 | 5.323 | 1.00 | 37.48 | D |
| ATOM | 4882 | CB | ARG | D | 173 | 105.254 | 84.464 | 6.819 | 1.00 | 40.07 | D |
| ATOM | 4883 | CG | ARG | D | 173 | 106.286 | 83.838 | 7.734 | 1.00 | 40.07 | D |
| ATOM | 4884 | CD | ARG | D | 173 | 105.855 | 83.992 | 9.185 | 1.00 | 40.07 | D |
| ATOM | 4885 | NE | ARG | D | 173 | 106.850 | 83.523 | 10.147 | 1.00 | 40.07 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 4886 | CZ | ARG | D | 173 | 108.006 | 84.133 | 10.405 | 1.00 | 40.07 | D |
| ATOM | 4887 | NH1 | ARG | D | 173 | 108.336 | 85.254 | 9.776 | 1.00 | 40.07 | D |
| ATOM | 4888 | NH2 | ARG | D | 173 | 108.837 | 83.618 | 11.300 | 1.00 | 40.07 | D |
| ATOM | 4889 | C | ARG | D | 173 | 105.248 | 82.759 | 4.974 | 1.00 | 37.48 | D |
| ATOM | 4890 | O | ARG | D | 173 | 104.207 | 82.407 | 4.414 | 1.00 | 37.48 | D |
| ATOM | 4891 | N | GLU | D | 174 | 106.222 | 81.906 | 5.281 | 1.00 | 47.99 | D |
| ATOM | 4892 | CA | GLU | D | 174 | 106.096 | 80.479 | 4.993 | 1.00 | 47.99 | D |
| ATOM | 4893 | CB | GLU | D | 174 | 107.468 | 79.814 | 4.956 | 1.00 | 95.11 | D |
| ATOM | 4894 | CG | GLU | D | 174 | 108.460 | 80.471 | 4.032 | 1.00 | 95.11 | D |
| ATOM | 4895 | CD | GLU | D | 174 | 109.762 | 79.708 | 3.977 | 1.00 | 95.11 | D |
| ATOM | 4896 | OE1 | GLU | D | 174 | 109.748 | 78.552 | 3.499 | 1.00 | 95.11 | D |
| ATOM | 4897 | OE2 | GLU | D | 174 | 110.795 | 80.257 | 4.419 | 1.00 | 95.11 | D |
| ATOM | 4898 | C | GLU | D | 174 | 105.258 | 79.825 | 6.085 | 1.00 | 47.99 | D |
| ATOM | 4899 | O | GLU | D | 174 | 105.514 | 80.021 | 7.275 | 1.00 | 47.99 | D |
| ATOM | 4900 | N | GLY | D | 175 | 104.269 | 79.038 | 5.678 | 1.00 | 39.14 | D |
| ATOM | 4901 | CA | GLY | D | 175 | 103.413 | 78.381 | 6.645 | 1.00 | 39.14 | D |
| ATOM | 4902 | C | GLY | D | 175 | 104.169 | 77.474 | 7.590 | 1.00 | 39.14 | D |
| ATOM | 4903 | O | GLY | D | 175 | 103.674 | 77.123 | 8.661 | 1.00 | 39.14 | D |
| ATOM | 4904 | N | THR | D | 176 | 105.377 | 77.096 | 7.189 | 1.00 | 45.29 | D |
| ATOM | 4905 | CA | THR | D | 176 | 106.219 | 76.211 | 7.982 | 1.00 | 45.29 | D |
| ATOM | 4906 | CB | THR | D | 176 | 107.346 | 75.605 | 7.126 | 1.00 | 45.75 | D |
| ATOM | 4907 | OG1 | THR | D | 176 | 108.078 | 76.668 | 6.498 | 1.00 | 45.75 | D |
| ATOM | 4908 | CG2 | THR | D | 176 | 106.777 | 74.669 | 6.056 | 1.00 | 45.75 | D |
| ATOM | 4909 | C | THR | D | 176 | 106.869 | 76.943 | 9.134 | 1.00 | 45.29 | D |
| ATOM | 4910 | O | THR | D | 176 | 107.334 | 76.319 | 10.084 | 1.00 | 45.29 | D |
| ATOM | 4911 | N | ARG | D | 177 | 106.898 | 78.267 | 9.050 | 1.00 | 42.35 | D |
| ATOM | 4912 | CA | ARG | D | 177 | 107.526 | 79.079 | 10.083 | 1.00 | 42.35 | D |
| ATOM | 4913 | CB | ARG | D | 177 | 108.490 | 80.089 | 9.447 | 1.00 | 65.75 | D |
| ATOM | 4914 | CG | ARG | D | 177 | 109.524 | 79.503 | 8.490 | 1.00 | 65.75 | D |
| ATOM | 4915 | CD | ARG | D | 177 | 110.680 | 80.478 | 8.324 | 1.00 | 65.75 | D |
| ATOM | 4916 | NE | ARG | D | 177 | 111.327 | 80.693 | 9.614 | 1.00 | 65.75 | D |
| ATOM | 4917 | CZ | ARG | D | 177 | 111.830 | 81.852 | 10.028 | 1.00 | 65.75 | D |
| ATOM | 4918 | NH1 | ARG | D | 177 | 111.774 | 82.927 | 9.247 | 1.00 | 65.75 | D |
| ATOM | 4919 | NH2 | ARG | D | 177 | 112.364 | 81.940 | 11.242 | 1.00 | 65.75 | D |
| ATOM | 4920 | C | ARG | D | 177 | 106.491 | 79.837 | 10.899 | 1.00 | 42.35 | D |
| ATOM | 4921 | O | ARG | D | 177 | 106.658 | 81.021 | 11.186 | 1.00 | 42.35 | D |
| ATOM | 4922 | N | THR | D | 178 | 105.427 | 79.166 | 11.303 | 1.00 | 41.88 | D |
| ATOM | 4923 | CA | THR | D | 178 | 104.397 | 79.872 | 12.045 | 1.00 | 41.88 | D |
| ATOM | 4924 | CB | THR | D | 178 | 103.262 | 80.301 | 11.096 | 1.00 | 36.87 | D |
| ATOM | 4925 | OG1 | THR | D | 178 | 102.827 | 79.163 | 10.340 | 1.00 | 36.87 | D |
| ATOM | 4926 | CG2 | THR | D | 178 | 103.751 | 81.378 | 10.133 | 1.00 | 36.87 | D |
| ATOM | 4927 | C | THR | D | 178 | 103.798 | 79.071 | 13.174 | 1.00 | 41.88 | D |
| ATOM | 4928 | O | THR | D | 178 | 103.663 | 77.855 | 13.084 | 1.00 | 41.88 | D |
| ATOM | 4929 | N | LYS | D | 179 | 103.449 | 79.766 | 14.249 | 1.00 | 43.77 | D |
| ATOM | 4930 | CA | LYS | D | 179 | 102.815 | 79.131 | 15.396 | 1.00 | 43.77 | D |
| ATOM | 4931 | CB | LYS | D | 179 | 103.669 | 79.308 | 16.647 | 1.00 | 76.20 | D |
| ATOM | 4932 | CG | LYS | D | 179 | 104.980 | 78.555 | 16.562 | 1.00 | 76.20 | D |
| ATOM | 4933 | CD | LYS | D | 179 | 105.610 | 78.370 | 17.926 | 1.00 | 76.20 | D |
| ATOM | 4934 | CE | LYS | D | 179 | 106.804 | 77.423 | 17.854 | 1.00 | 76.20 | D |
| ATOM | 4935 | NZ | LYS | D | 179 | 107.291 | 77.045 | 19.214 | 1.00 | 76.20 | D |
| ATOM | 4936 | C | LYS | D | 179 | 101.467 | 79.810 | 15.544 | 1.00 | 43.77 | D |
| ATOM | 4937 | O | LYS | D | 179 | 101.357 | 81.014 | 15.325 | 1.00 | 43.77 | D |
| ATOM | 4938 | N | ARG | D | 180 | 100.447 | 79.037 | 15.902 | 1.00 | 43.98 | D |
| ATOM | 4939 | CA | ARG | D | 180 | 99.085 | 79.555 | 16.032 | 1.00 | 43.98 | D |
| ATOM | 4940 | CB | ARG | D | 180 | 98.181 | 78.519 | 16.714 | 1.00 | 36.86 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 4941 | CG | ARG | D | 180 | 96.711 | 78.951 | 16.849 | 1.00 | 36.86 | D |
| ATOM | 4942 | CD | ARG | D | 180 | 95.926 | 78.037 | 17.786 | 1.00 | 36.86 | D |
| ATOM | 4943 | NE | ARG | D | 180 | 95.647 | 76.712 | 17.226 | 1.00 | 36.86 | D |
| ATOM | 4944 | CZ | ARG | D | 180 | 94.565 | 76.404 | 16.511 | 1.00 | 36.86 | D |
| ATOM | 4945 | NH1 | ARG | D | 180 | 93.641 | 77.321 | 16.259 | 1.00 | 36.86 | D |
| ATOM | 4946 | NH2 | ARG | D | 180 | 94.403 | 75.173 | 16.044 | 1.00 | 36.86 | D |
| ATOM | 4947 | C | ARG | D | 180 | 98.923 | 80.897 | 16.741 | 1.00 | 43.98 | D |
| ATOM | 4948 | O | ARG | D | 180 | 98.293 | 81.809 | 16.209 | 1.00 | 43.98 | D |
| ATOM | 4949 | N | HIS | D | 181 | 99.503 | 81.036 | 17.927 | 1.00 | 48.60 | D |
| ATOM | 4950 | CA | HIS | D | 181 | 99.344 | 82.274 | 18.684 | 1.00 | 48.60 | D |
| ATOM | 4951 | CB | HIS | D | 181 | 99.605 | 81.997 | 20.161 | 1.00 | 41.41 | D |
| ATOM | 4952 | CG | HIS | D | 181 | 98.677 | 80.977 | 20.738 | 1.00 | 41.41 | D |
| ATOM | 4953 | CD2 | HIS | D | 181 | 98.917 | 79.838 | 21.432 | 1.00 | 41.41 | D |
| ATOM | 4954 | ND1 | HIS | D | 181 | 97.310 | 81.044 | 20.570 | 1.00 | 41.41 | D |
| ATOM | 4955 | CE1 | HIS | D | 181 | 96.747 | 79.987 | 21.131 | 1.00 | 41.41 | D |
| ATOM | 4956 | NE2 | HIS | D | 181 | 97.699 | 79.240 | 21.661 | 1.00 | 41.41 | D |
| ATOM | 4957 | C | HIS | D | 181 | 100.119 | 83.508 | 18.241 | 1.00 | 48.60 | D |
| ATOM | 4958 | O | HIS | D | 181 | 99.938 | 84.591 | 18.806 | 1.00 | 48.60 | D |
| ATOM | 4959 | N | GLN | D | 182 | 100.968 | 83.368 | 17.230 | 1.00 | 45.43 | D |
| ATOM | 4960 | CA | GLN | D | 182 | 101.729 | 84.516 | 16.761 | 1.00 | 45.43 | D |
| ATOM | 4961 | CB | GLN | D | 182 | 102.874 | 84.063 | 15.870 | 1.00 | 46.51 | D |
| ATOM | 4962 | CG | GLN | D | 182 | 103.944 | 83.337 | 16.652 | 1.00 | 46.51 | D |
| ATOM | 4963 | CD | GLN | D | 182 | 105.070 | 82.858 | 15.778 | 1.00 | 46.51 | D |
| ATOM | 4964 | OE1 | GLN | D | 182 | 104.901 | 81.940 | 14.969 | 1.00 | 46.51 | D |
| ATOM | 4965 | NE2 | GLN | D | 182 | 106.232 | 83.482 | 15.924 | 1.00 | 46.51 | D |
| ATOM | 4966 | C | GLN | D | 182 | 100.834 | 85.495 | 16.028 | 1.00 | 45.43 | D |
| ATOM | 4967 | O | GLN | D | 182 | 99.910 | 85.108 | 15.321 | 1.00 | 45.43 | D |
| ATOM | 4968 | N | LYS | D | 183 | 101.112 | 86.773 | 16.212 | 1.00 | 42.01 | D |
| ATOM | 4969 | CA | LYS | D | 183 | 100.315 | 87.809 | 15.593 | 1.00 | 42.01 | D |
| ATOM | 4970 | CB | LYS | D | 183 | 100.899 | 89.186 | 15.916 | 1.00 | 72.38 | D |
| ATOM | 4971 | CG | LYS | D | 183 | 100.941 | 89.489 | 17.400 | 1.00 | 72.38 | D |
| ATOM | 4972 | CD | LYS | D | 183 | 99.552 | 89.415 | 18.019 | 1.00 | 72.38 | D |
| ATOM | 4973 | CE | LYS | D | 183 | 99.609 | 89.535 | 19.536 | 1.00 | 72.38 | D |
| ATOM | 4974 | NZ | LYS | D | 183 | 100.233 | 90.817 | 19.986 | 1.00 | 72.38 | D |
| ATOM | 4975 | C | LYS | D | 183 | 100.145 | 87.671 | 14.091 | 1.00 | 42.01 | D |
| ATOM | 4976 | O | LYS | D | 183 | 99.028 | 87.830 | 13.586 | 1.00 | 42.01 | D |
| ATOM | 4977 | N | PHE | D | 184 | 101.219 | 87.360 | 13.364 | 1.00 | 38.78 | D |
| ATOM | 4978 | CA | PHE | D | 184 | 101.062 | 87.294 | 11.921 | 1.00 | 38.78 | D |
| ATOM | 4979 | CB | PHE | D | 184 | 102.415 | 87.240 | 11.191 | 1.00 | 52.35 | D |
| ATOM | 4980 | CG | PHE | D | 184 | 103.415 | 86.307 | 11.791 | 1.00 | 52.35 | D |
| ATOM | 4981 | CD1 | PHE | D | 184 | 103.083 | 84.985 | 12.077 | 1.00 | 52.35 | D |
| ATOM | 4982 | CD2 | PHE | D | 184 | 104.717 | 86.741 | 12.021 | 1.00 | 52.35 | D |
| ATOM | 4983 | CE1 | PHE | D | 184 | 104.040 | 84.102 | 12.584 | 1.00 | 52.35 | D |
| ATOM | 4984 | CE2 | PHE | D | 184 | 105.682 | 85.875 | 12.525 | 1.00 | 52.35 | D |
| ATOM | 4985 | CZ | PHE | D | 184 | 105.345 | 84.548 | 12.808 | 1.00 | 52.35 | D |
| ATOM | 4986 | C | PHE | D | 184 | 100.122 | 86.233 | 11.387 | 1.00 | 38.78 | D |
| ATOM | 4987 | O | PHE | D | 184 | 99.836 | 86.227 | 10.192 | 1.00 | 38.78 | D |
| ATOM | 4988 | N | THR | D | 185 | 99.614 | 85.357 | 12.253 | 1.00 | 36.57 | D |
| ATOM | 4989 | CA | THR | D | 185 | 98.671 | 84.332 | 11.797 | 1.00 | 36.57 | D |
| ATOM | 4990 | CB | THR | D | 185 | 98.864 | 82.975 | 12.510 | 1.00 | 41.53 | D |
| ATOM | 4991 | OG1 | THR | D | 185 | 98.443 | 83.087 | 13.872 | 1.00 | 41.53 | D |
| ATOM | 4992 | CG2 | THR | D | 185 | 100.313 | 82.546 | 12.468 | 1.00 | 41.53 | D |
| ATOM | 4993 | C | THR | D | 185 | 97.235 | 84.785 | 12.055 | 1.00 | 36.57 | D |
| ATOM | 4994 | O | THR | D | 185 | 96.283 | 84.158 | 11.590 | 1.00 | 36.57 | D |
| ATOM | 4995 | N | HIS | D | 186 | 97.081 | 85.879 | 12.794 | 1.00 | 36.17 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4996 | CA | HIS | D | 186 | 95.751 | 86.398 | 13.106 | 1.00 | 36.17 | D |
| ATOM | 4997 | CB | HIS | D | 186 | 95.819 | 87.268 | 14.361 | 1.00 | 37.74 | D |
| ATOM | 4998 | CG | HIS | D | 186 | 96.372 | 86.550 | 15.553 | 1.00 | 37.74 | D |
| ATOM | 4999 | CD2 | HIS | D | 186 | 96.859 | 85.294 | 15.686 | 1.00 | 37.74 | D |
| ATOM | 5000 | ND1 | HIS | D | 186 | 96.451 | 87.125 | 16.803 | 1.00 | 37.74 | D |
| ATOM | 5001 | CE1 | HIS | D | 186 | 96.962 | 86.253 | 17.654 | 1.00 | 37.74 | D |
| ATOM | 5002 | NE2 | HIS | D | 186 | 97.217 | 85.134 | 17.003 | 1.00 | 37.74 | D |
| ATOM | 5003 | C | HIS | D | 186 | 95.153 | 87.186 | 11.944 | 1.00 | 36.17 | D |
| ATOM | 5004 | O | HIS | D | 186 | 95.734 | 88.163 | 11.482 | 1.00 | 36.17 | D |
| ATOM | 5005 | N | PHE | D | 187 | 93.994 | 86.742 | 11.463 | 1.00 | 34.90 | D |
| ATOM | 5006 | CA | PHE | D | 187 | 93.338 | 87.404 | 10.351 | 1.00 | 34.90 | D |
| ATOM | 5007 | CB | PHE | D | 187 | 93.420 | 86.559 | 9.079 | 1.00 | 43.72 | D |
| ATOM | 5008 | CG | PHE | D | 187 | 94.775 | 86.542 | 8.447 | 1.00 | 43.72 | D |
| ATOM | 5009 | CD1 | PHE | D | 187 | 95.786 | 85.726 | 8.952 | 1.00 | 43.72 | D |
| ATOM | 5010 | CD2 | PHE | D | 187 | 95.047 | 87.339 | 7.337 | 1.00 | 43.72 | D |
| ATOM | 5011 | CE1 | PHE | D | 187 | 97.051 | 85.706 | 8.360 | 1.00 | 43.72 | D |
| ATOM | 5012 | CE2 | PHE | D | 187 | 96.313 | 87.326 | 6.736 | 1.00 | 43.72 | D |
| ATOM | 5013 | CZ | PHE | D | 187 | 97.312 | 86.506 | 7.250 | 1.00 | 43.72 | D |
| ATOM | 5014 | C | PHE | D | 187 | 91.882 | 87.702 | 10.647 | 1.00 | 34.90 | D |
| ATOM | 5015 | O | PHE | D | 187 | 91.104 | 86.823 | 11.039 | 1.00 | 34.90 | D |
| ATOM | 5016 | N | LEU | D | 188 | 91.508 | 88.953 | 10.423 | 1.00 | 38.29 | D |
| ATOM | 5017 | CA | LEU | D | 188 | 90.154 | 89.378 | 10.674 | 1.00 | 38.29 | D |
| ATOM | 5018 | CB | LEU | D | 188 | 90.174 | 90.723 | 11.386 | 1.00 | 35.67 | D |
| ATOM | 5019 | CG | LEU | D | 188 | 88.818 | 91.366 | 11.628 | 1.00 | 35.67 | D |
| ATOM | 5020 | CD1 | LEU | D | 188 | 88.028 | 90.532 | 12.617 | 1.00 | 35.67 | D |
| ATOM | 5021 | CD2 | LEU | D | 188 | 89.026 | 92.781 | 12.146 | 1.00 | 35.67 | D |
| ATOM | 5022 | C | LEU | D | 188 | 89.335 | 89.487 | 9.401 | 1.00 | 38.29 | D |
| ATOM | 5023 | O | LEU | D | 188 | 89.689 | 90.225 | 8.481 | 1.00 | 38.29 | D |
| ATOM | 5024 | N | PRO | D | 189 | 88.243 | 88.719 | 9.314 | 1.00 | 40.36 | D |
| ATOM | 5025 | CD | PRO | D | 189 | 87.906 | 87.527 | 10.115 | 1.00 | 22.38 | D |
| ATOM | 5026 | CA | PRO | D | 189 | 87.415 | 88.805 | 8.108 | 1.00 | 40.36 | D |
| ATOM | 5027 | CB | PRO | D | 189 | 86.483 | 87.599 | 8.225 | 1.00 | 22.38 | D |
| ATOM | 5028 | CG | PRO | D | 189 | 87.261 | 86.623 | 9.091 | 1.00 | 22.38 | D |
| ATOM | 5029 | C | PRO | D | 189 | 86.656 | 90.114 | 8.250 | 1.00 | 40.36 | D |
| ATOM | 5030 | O | PRO | D | 189 | 85.950 | 90.306 | 9.227 | 1.00 | 40.36 | D |
| ATOM | 5031 | N | ARG | D | 190 | 86.824 | 91.025 | 7.305 | 1.00 | 35.97 | D |
| ATOM | 5032 | CA | ARG | D | 190 | 86.130 | 92.300 | 7.363 | 1.00 | 35.97 | D |
| ATOM | 5033 | CB | ARG | D | 190 | 87.118 | 93.461 | 7.251 | 1.00 | 32.43 | D |
| ATOM | 5034 | CG | ARG | D | 190 | 88.136 | 93.574 | 8.373 | 1.00 | 32.43 | D |
| ATOM | 5035 | CD | ARG | D | 190 | 89.010 | 94.800 | 8.127 | 1.00 | 32.43 | D |
| ATOM | 5036 | NE | ARG | D | 190 | 88.194 | 96.000 | 7.989 | 1.00 | 32.43 | D |
| ATOM | 5037 | CZ | ARG | D | 190 | 88.340 | 96.912 | 7.033 | 1.00 | 32.43 | D |
| ATOM | 5038 | NH1 | ARG | D | 190 | 89.278 | 96.767 | 6.110 | 1.00 | 32.43 | D |
| ATOM | 5039 | NH2 | ARG | D | 190 | 87.542 | 97.969 | 7.000 | 1.00 | 32.43 | D |
| ATOM | 5040 | C | ARG | D | 190 | 85.135 | 92.384 | 6.215 | 1.00 | 35.97 | D |
| ATOM | 5041 | O | ARG | D | 190 | 85.321 | 91.764 | 5.167 | 1.00 | 35.97 | D |
| ATOM | 5042 | N | PRO | D | 191 | 84.055 | 93.150 | 6.405 | 1.00 | 48.39 | D |
| ATOM | 5043 | CD | PRO | D | 191 | 83.650 | 93.840 | 7.641 | 1.00 | 39.44 | D |
| ATOM | 5044 | CA | PRO | D | 191 | 83.035 | 93.308 | 5.373 | 1.00 | 48.39 | D |
| ATOM | 5045 | CB | PRO | D | 191 | 81.893 | 93.973 | 6.125 | 1.00 | 39.44 | D |
| ATOM | 5046 | CG | PRO | D | 191 | 82.594 | 94.789 | 7.137 | 1.00 | 39.44 | D |
| ATOM | 5047 | C | PRO | D | 191 | 83.524 | 94.168 | 4.226 | 1.00 | 48.39 | D |
| ATOM | 5048 | O | PRO | D | 191 | 84.457 | 94.960 | 4.377 | 1.00 | 48.39 | D |
| ATOM | 5049 | N | VAL | D | 192 | 82.887 | 93.998 | 3.075 | 1.00 | 40.09 | D |
| ATOM | 5050 | CA | VAL | D | 192 | 83.214 | 94.766 | 1.890 | 1.00 | 40.09 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|---------|------|-------|---|
| ATOM | 5051 | CB | VAL | D | 192 | 83.335 | 93.853 | 0.644 | 1.00 | 41.60 | D |
| ATOM | 5052 | CG1 | VAL | D | 192 | 83.502 | 94.705 | -0.609 | 1.00 | 41.60 | D |
| ATOM | 5053 | CG2 | VAL | D | 192 | 84.513 | 92.903 | 0.802 | 1.00 | 41.60 | D |
| ATOM | 5054 | C | VAL | D | 192 | 82.081 | 95.763 | 1.676 | 1.00 | 40.09 | D |
| ATOM | 5055 | O | VAL | D | 192 | 80.895 | 95.397 | 1.721 | 1.00 | 40.09 | D |
| ATOM | 5056 | N | ASP | D | 193 | 82.454 | 97.023 | 1.469 | 1.00 | 45.53 | D |
| ATOM | 5057 | CA | ASP | D | 193 | 81.495 | 98.104 | 1.242 | 1.00 | 45.53 | D |
| ATOM | 5058 | CB | ASP | D | 193 | 82.035 | 99.416 | 1.824 | 1.00 | 46.23 | D |
| ATOM | 5059 | CG | ASP | D | 193 | 81.049 | 100.576 | 1.701 | 1.00 | 46.23 | D |
| ATOM | 5060 | OD1 | ASP | D | 193 | 80.063 | 100.467 | 0.932 | 1.00 | 46.23 | D |
| ATOM | 5061 | OD2 | ASP | D | 193 | 81.272 | 101.608 | 2.374 | 1.00 | 46.23 | D |
| ATOM | 5062 | C | ASP | D | 193 | 81.313 | 98.247 | -0.263 | 1.00 | 45.53 | D |
| ATOM | 5063 | O | ASP | D | 193 | 82.216 | 98.693 | -0.966 | 1.00 | 45.53 | D |
| ATOM | 5064 | N | PRO | D | 194 | 80.141 | 97.874 | -0.776 | 1.00 | 58.97 | D |
| ATOM | 5065 | CD | PRO | D | 194 | 78.954 | 97.375 | -0.065 | 1.00 | 48.88 | D |
| ATOM | 5066 | CA | PRO | D | 194 | 79.885 | 97.975 | -2.214 | 1.00 | 58.97 | D |
| ATOM | 5067 | CB | PRO | D | 194 | 78.400 | 97.632 | -2.319 | 1.00 | 48.88 | D |
| ATOM | 5068 | CG | PRO | D | 194 | 78.196 | 96.694 | -1.169 | 1.00 | 48.88 | D |
| ATOM | 5069 | C | PRO | D | 194 | 80.212 | 99.356 | -2.795 | 1.00 | 58.97 | D |
| ATOM | 5070 | O | PRO | D | 194 | 80.672 | 99.462 | -3.935 | 1.00 | 58.97 | D |
| ATOM | 5071 | N | ASP | D | 195 | 79.974 | 100.405 | -2.010 | 1.00 | 70.32 | D |
| ATOM | 5072 | CA | ASP | D | 195 | 80.238 | 101.773 | -2.454 | 1.00 | 70.32 | D |
| ATOM | 5073 | CB | ASP | D | 195 | 79.792 | 102.786 | -1.389 | 1.00 | 75.87 | D |
| ATOM | 5074 | CG | ASP | D | 195 | 78.298 | 102.756 | -1.132 | 1.00 | 75.87 | D |
| ATOM | 5075 | OD1 | ASP | D | 195 | 77.534 | 102.483 | -2.083 | 1.00 | 75.87 | D |
| ATOM | 5076 | OD2 | ASP | D | 195 | 77.885 | 103.025 | 0.017 | 1.00 | 75.87 | D |
| ATOM | 5077 | C | ASP | D | 195 | 81.706 | 102.043 | -2.782 | 1.00 | 70.32 | D |
| ATOM | 5078 | O | ASP | D | 195 | 82.010 | 102.908 | -3.601 | 1.00 | 70.32 | D |
| ATOM | 5079 | N | LYS | D | 196 | 82.613 | 101.310 | -2.145 | 1.00 | 63.50 | D |
| ATOM | 5080 | CA | LYS | D | 196 | 84.036 | 101.522 | -2.366 | 1.00 | 63.50 | D |
| ATOM | 5081 | CB | LYS | D | 196 | 84.800 | 101.273 | -1.070 | 1.00 | 64.38 | D |
| ATOM | 5082 | CG | LYS | D | 196 | 84.383 | 102.194 | 0.053 | 1.00 | 64.38 | D |
| ATOM | 5083 | CD | LYS | D | 196 | 85.336 | 102.107 | 1.237 | 1.00 | 64.38 | D |
| ATOM | 5084 | CE | LYS | D | 196 | 84.895 | 103.043 | 2.354 | 1.00 | 64.38 | D |
| ATOM | 5085 | NZ | LYS | D | 196 | 84.611 | 104.410 | 1.811 | 1.00 | 64.38 | D |
| ATOM | 5086 | C | LYS | D | 196 | 84.669 | 100.715 | -3.490 | 1.00 | 63.50 | D |
| ATOM | 5087 | O | LYS | D | 196 | 85.830 | 100.931 | -3.830 | 1.00 | 63.50 | D |
| ATOM | 5088 | N | VAL | D | 197 | 83.920 | 99.785 | -4.063 | 1.00 | 54.17 | D |
| ATOM | 5089 | CA | VAL | D | 197 | 84.439 | 98.966 | -5.153 | 1.00 | 54.17 | D |
| ATOM | 5090 | CB | VAL | D | 197 | 85.082 | 97.645 | -4.635 | 1.00 | 42.93 | D |
| ATOM | 5091 | CG1 | VAL | D | 197 | 86.391 | 97.944 | -3.915 | 1.00 | 42.93 | D |
| ATOM | 5092 | CG2 | VAL | D | 197 | 84.116 | 96.916 | -3.693 | 1.00 | 42.93 | D |
| ATOM | 5093 | C | VAL | D | 197 | 83.301 | 98.617 | -6.100 | 1.00 | 54.17 | D |
| ATOM | 5094 | O | VAL | D | 197 | 83.026 | 97.442 | -6.339 | 1.00 | 54.17 | D |
| ATOM | 5095 | N | PRO | D | 198 | 82.635 | 99.641 | -6.666 | 1.00 | 72.12 | D |
| ATOM | 5096 | CD | PRO | D | 198 | 82.941 | 101.067 | -6.463 | 1.00 | 59.25 | D |
| ATOM | 5097 | CA | PRO | D | 198 | 81.510 | 99.491 | -7.596 | 1.00 | 72.12 | D |
| ATOM | 5098 | CB | PRO | D | 198 | 81.219 | 100.927 | -8.017 | 1.00 | 59.25 | D |
| ATOM | 5099 | CG | PRO | D | 198 | 81.631 | 101.716 | -6.824 | 1.00 | 59.25 | D |
| ATOM | 5100 | C | PRO | D | 198 | 81.771 | 98.590 | -8.798 | 1.00 | 72.12 | D |
| ATOM | 5101 | O | PRO | D | 198 | 80.848 | 97.967 | -9.319 | 1.00 | 72.12 | D |
| ATOM | 5102 | N | GLU | D | 199 | 83.023 | 98.523 | -9.237 | 1.00 | 98.89 | D |
| ATOM | 5103 | CA | GLU | D | 199 | 83.371 | 97.694 | -10.384 | 1.00 | 98.89 | D |
| ATOM | 5104 | CB | GLU | D | 199 | 84.871 | 97.780 | -10.680 | 1.00 | 93.86 | D |
| ATOM | 5105 | CG | GLU | D | 199 | 85.527 | 99.095 | -10.299 | 1.00 | 93.86 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|---------|---------|------|--------|---|
| ATOM | 5106 | CD | GLU | D | 199 | 85.787 | 99.206 | -8.804 | 1.00 | 93.86 | D |
| ATOM | 5107 | OE1 | GLU | D | 199 | 86.493 | 98.331 | -8.257 | 1.00 | 93.86 | D |
| ATOM | 5108 | OE2 | GLU | D | 199 | 85.292 | 100.167 | -8.178 | 1.00 | 93.86 | D |
| ATOM | 5109 | C | GLU | D | 199 | 83.003 | 96.237 | -10.121 | 1.00 | 98.89 | D |
| ATOM | 5110 | O | GLU | D | 199 | 82.685 | 95.488 | -11.048 | 1.00 | 98.89 | D |
| ATOM | 5111 | N | LEU | D | 200 | 83.043 | 95.840 | -8.852 | 1.00 | 77.26 | D |
| ATOM | 5112 | CA | LEU | D | 200 | 82.737 | 94.468 | -8.470 | 1.00 | 77.26 | D |
| ATOM | 5113 | CB | LEU | D | 200 | 83.522 | 94.099 | -7.211 | 1.00 | 63.45 | D |
| ATOM | 5114 | CG | LEU | D | 200 | 85.029 | 94.384 | -7.247 | 1.00 | 63.45 | D |
| ATOM | 5115 | CD1 | LEU | D | 200 | 85.669 | 93.865 | -5.969 | 1.00 | 63.45 | D |
| ATOM | 5116 | CD2 | LEU | D | 200 | 85.669 | 93.721 | -8.460 | 1.00 | 63.45 | D |
| ATOM | 5117 | C | LEU | D | 200 | 81.249 | 94.207 | -8.246 | 1.00 | 77.26 | D |
| ATOM | 5118 | O | LEU | D | 200 | 80.810 | 93.061 | -8.260 | 1.00 | 77.26 | D |
| ATOM | 5119 | N | TYR | D | 201 | 80.471 | 95.264 | -8.044 | 1.00 | 79.23 | D |
| ATOM | 5120 | CA | TYR | D | 201 | 79.041 | 95.102 | -7.815 | 1.00 | 79.23 | D |
| ATOM | 5121 | CB | TYR | D | 201 | 78.626 | 95.788 | -6.505 | 1.00 | 53.35 | D |
| ATOM | 5122 | CG | TYR | D | 201 | 79.158 | 95.096 | -5.265 | 1.00 | 53.35 | D |
| ATOM | 5123 | CD1 | TYR | D | 201 | 80.496 | 95.214 | -4.900 | 1.00 | 53.35 | D |
| ATOM | 5124 | CE1 | TYR | D | 201 | 81.009 | 94.521 | -3.815 | 1.00 | 53.35 | D |
| ATOM | 5125 | CD2 | TYR | D | 201 | 78.340 | 94.264 | -4.500 | 1.00 | 53.35 | D |
| ATOM | 5126 | CE2 | TYR | D | 201 | 78.847 | 93.564 | -3.411 | 1.00 | 53.35 | D |
| ATOM | 5127 | CZ | TYR | D | 201 | 80.183 | 93.697 | -3.077 | 1.00 | 53.35 | D |
| ATOM | 5128 | OH | TYR | D | 201 | 80.704 | 93.008 | -2.009 | 1.00 | 53.35 | D |
| ATOM | 5129 | C | TYR | D | 201 | 78.183 | 95.620 | -8.964 | 1.00 | 79.23 | D |
| ATOM | 5130 | O | TYR | D | 201 | 77.087 | 96.141 | -8.746 | 1.00 | 79.23 | D |
| ATOM | 5131 | N | LYS | D | 202 | 78.677 | 95.468 | -10.190 | 1.00 | 99.88 | D |
| ATOM | 5132 | CA | LYS | D | 202 | 77.931 | 95.921 | -11.359 | 1.00 | 99.88 | D |
| ATOM | 5133 | CB | LYS | D | 202 | 78.812 | 95.869 | -12.609 | 1.00 | 100.00 | D |
| ATOM | 5134 | CG | LYS | D | 202 | 80.025 | 96.788 | -12.550 | 1.00 | 100.00 | D |
| ATOM | 5135 | CD | LYS | D | 202 | 80.778 | 96.818 | -13.878 | 1.00 | 100.00 | D |
| ATOM | 5136 | CE | LYS | D | 202 | 82.027 | 97.691 | -13.791 | 1.00 | 100.00 | D |
| ATOM | 5137 | NZ | LYS | D | 202 | 81.715 | 99.091 | -13.377 | 1.00 | 100.00 | D |
| ATOM | 5138 | C | LYS | D | 202 | 76.683 | 95.067 | -11.567 | 1.00 | 99.88 | D |
| ATOM | 5139 | O | LYS | D | 202 | 75.630 | 95.581 | -11.949 | 1.00 | 99.88 | D |
| ATOM | 5140 | N | ASP | D | 203 | 76.803 | 93.766 | -11.307 | 1.00 | 100.00 | D |
| ATOM | 5141 | CA | ASP | D | 203 | 75.683 | 92.837 | -11.461 | 1.00 | 100.00 | D |
| ATOM | 5142 | CB | ASP | D | 203 | 76.079 | 91.426 | -11.006 | 1.00 | 100.00 | D |
| ATOM | 5143 | CG | ASP | D | 203 | 77.131 | 90.790 | -11.899 | 1.00 | 100.00 | D |
| ATOM | 5144 | OD1 | ASP | D | 203 | 77.436 | 89.593 | -11.693 | 1.00 | 100.00 | D |
| ATOM | 5145 | OD2 | ASP | D | 203 | 77.650 | 91.483 | -12.802 | 1.00 | 100.00 | D |
| ATOM | 5146 | C | ASP | D | 203 | 74.457 | 93.281 | -10.667 | 1.00 | 100.00 | D |
| ATOM | 5147 | O | ASP | D | 203 | 74.540 | 94.312 | -9.964 | 1.00 | 100.00 | D |
| ATOM | 5148 | OXT | ASP | D | 203 | 73.427 | 92.581 | -10.755 | 1.00 | 100.00 | D |
| ATOM | 5149 | C1 | NAG | A | 651 | 63.850 | 94.832 | 26.593 | 1.00 | 68.55 | A |
| ATOM | 5150 | C2 | NAG | A | 651 | 63.632 | 94.709 | 28.104 | 1.00 | 68.55 | A |
| ATOM | 5151 | N2 | NAG | A | 651 | 63.712 | 96.022 | 28.706 | 1.00 | 68.55 | A |
| ATOM | 5152 | C7 | NAG | A | 651 | 62.733 | 96.458 | 29.489 | 1.00 | 68.55 | A |
| ATOM | 5153 | O7 | NAG | A | 651 | 62.767 | 96.333 | 30.707 | 1.00 | 68.55 | A |
| ATOM | 5154 | C8 | NAG | A | 651 | 61.541 | 97.145 | 28.833 | 1.00 | 68.55 | A |
| ATOM | 5155 | C3 | NAG | A | 651 | 64.668 | 93.777 | 28.731 | 1.00 | 68.55 | A |
| ATOM | 5156 | O3 | NAG | A | 651 | 64.408 | 93.631 | 30.120 | 1.00 | 68.55 | A |
| ATOM | 5157 | C4 | NAG | A | 651 | 64.589 | 92.423 | 28.037 | 1.00 | 68.55 | A |
| ATOM | 5158 | O4 | NAG | A | 651 | 65.540 | 91.503 | 28.618 | 1.00 | 68.55 | A |
| ATOM | 5159 | C5 | NAG | A | 651 | 64.884 | 92.637 | 26.552 | 1.00 | 68.55 | A |
| ATOM | 5160 | O5 | NAG | A | 651 | 63.898 | 93.531 | 25.975 | 1.00 | 68.55 | A |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|----|-----|---|-----|--------|---------|--------|------|--------|---|
| ATOM | 5161 | C6 | NAG | A | 651 | 64.834 | 91.342 | 25.754 | 1.00 | 68.55 | A |
| ATOM | 5162 | O6 | NAG | A | 651 | 63.504 | 90.789 | 25.810 | 1.00 | 68.55 | A |
| ATOM | 5163 | C1 | NAG | A | 652 | 65.055 | 90.264 | 29.021 | 1.00 | 91.39 | A |
| ATOM | 5164 | C2 | NAG | A | 652 | 66.236 | 89.366 | 29.427 | 1.00 | 91.39 | A |
| ATOM | 5165 | N2 | NAG | A | 652 | 67.021 | 89.025 | 28.258 | 1.00 | 91.39 | A |
| ATOM | 5166 | C7 | NAG | A | 652 | 67.846 | 89.914 | 27.717 | 1.00 | 91.39 | A |
| ATOM | 5167 | O7 | NAG | A | 652 | 67.681 | 90.373 | 26.589 | 1.00 | 91.39 | A |
| ATOM | 5168 | C8 | NAG | A | 652 | 69.048 | 90.346 | 28.545 | 1.00 | 91.39 | A |
| ATOM | 5169 | C3 | NAG | A | 652 | 65.763 | 88.069 | 30.091 | 1.00 | 91.39 | A |
| ATOM | 5170 | O3 | NAG | A | 652 | 66.883 | 87.363 | 30.607 | 1.00 | 91.39 | A |
| ATOM | 5171 | C4 | NAG | A | 652 | 64.773 | 88.370 | 31.218 | 1.00 | 91.39 | A |
| ATOM | 5172 | O4 | NAG | A | 652 | 64.258 | 87.153 | 31.745 | 1.00 | 91.39 | A |
| ATOM | 5173 | C5 | NAG | A | 652 | 63.635 | 89.227 | 30.656 | 1.00 | 91.39 | A |
| ATOM | 5174 | O5 | NAG | A | 652 | 64.168 | 90.468 | 30.138 | 1.00 | 91.39 | A |
| ATOM | 5175 | C6 | NAG | A | 652 | 62.563 | 89.576 | 31.681 | 1.00 | 91.39 | A |
| ATOM | 5176 | O6 | NAG | A | 652 | 63.108 | 90.271 | 32.795 | 1.00 | 91.39 | A |
| ATOM | 5177 | C1 | NAG | B | 651 | 38.808 | 84.496 | 68.218 | 1.00 | 100.00 | B |
| ATOM | 5178 | C2 | NAG | B | 651 | 38.502 | 84.541 | 66.698 | 1.00 | 100.00 | B |
| ATOM | 5179 | N2 | NAG | B | 651 | 37.072 | 84.723 | 66.499 | 1.00 | 100.00 | B |
| ATOM | 5180 | C7 | NAG | B | 651 | 36.568 | 84.920 | 65.283 | 1.00 | 100.00 | B |
| ATOM | 5181 | O7 | NAG | B | 651 | 36.554 | 86.022 | 64.734 | 1.00 | 100.00 | B |
| ATOM | 5182 | C8 | NAG | B | 651 | 35.979 | 83.713 | 64.570 | 1.00 | 100.00 | B |
| ATOM | 5183 | C3 | NAG | B | 651 | 38.962 | 83.241 | 66.008 | 1.00 | 100.00 | B |
| ATOM | 5184 | O3 | NAG | B | 651 | 38.856 | 83.380 | 64.598 | 1.00 | 100.00 | B |
| ATOM | 5185 | C4 | NAG | B | 651 | 40.410 | 82.911 | 66.382 | 1.00 | 100.00 | B |
| ATOM | 5186 | O4 | NAG | B | 651 | 40.783 | 81.657 | 65.828 | 1.00 | 100.00 | B |
| ATOM | 5187 | C5 | NAG | B | 651 | 40.537 | 82.866 | 67.906 | 1.00 | 100.00 | B |
| ATOM | 5188 | O5 | NAG | B | 651 | 40.186 | 84.151 | 68.459 | 1.00 | 100.00 | B |
| ATOM | 5189 | C6 | NAG | B | 651 | 41.941 | 82.534 | 68.377 | 1.00 | 100.00 | B |
| ATOM | 5190 | O6 | NAG | B | 651 | 42.198 | 81.140 | 68.280 | 1.00 | 100.00 | B |
| ATOM | 5191 | C1 | NAG | C | 651 | 63.417 | 128.288 | 49.924 | 1.00 | 68.42 | C |
| ATOM | 5192 | C2 | NAG | C | 651 | 64.708 | 129.119 | 49.891 | 1.00 | 68.42 | C |
| ATOM | 5193 | N2 | NAG | C | 651 | 65.331 | 129.025 | 48.584 | 1.00 | 68.42 | C |
| ATOM | 5194 | C7 | NAG | C | 651 | 65.531 | 130.125 | 47.864 | 1.00 | 68.42 | C |
| ATOM | 5195 | O7 | NAG | C | 651 | 64.832 | 130.432 | 46.896 | 1.00 | 68.42 | C |
| ATOM | 5196 | C8 | NAG | C | 651 | 66.688 | 131.026 | 48.280 | 1.00 | 68.42 | C |
| ATOM | 5197 | C3 | NAG | C | 651 | 65.698 | 128.660 | 50.957 | 1.00 | 68.42 | C |
| ATOM | 5198 | O3 | NAG | C | 651 | 66.807 | 129.548 | 50.985 | 1.00 | 68.42 | C |
| ATOM | 5199 | C4 | NAG | C | 651 | 65.026 | 128.643 | 52.324 | 1.00 | 68.42 | C |
| ATOM | 5200 | O4 | NAG | C | 651 | 65.942 | 128.124 | 53.313 | 1.00 | 68.42 | C |
| ATOM | 5201 | C5 | NAG | C | 651 | 63.754 | 127.784 | 52.275 | 1.00 | 68.42 | C |
| ATOM | 5202 | O5 | NAG | C | 651 | 62.859 | 128.275 | 51.250 | 1.00 | 68.42 | C |
| ATOM | 5203 | C6 | NAG | C | 651 | 62.989 | 127.882 | 53.582 | 1.00 | 68.42 | C |
| ATOM | 5204 | O6 | NAG | C | 651 | 62.608 | 129.258 | 53.793 | 1.00 | 68.42 | C |
| ATOM | 5205 | C1 | NAG | C | 652 | 66.171 | 128.931 | 54.421 | 1.00 | 100.00 | C |
| ATOM | 5206 | C2 | NAG | C | 652 | 66.861 | 128.115 | 55.522 | 1.00 | 100.00 | C |
| ATOM | 5207 | N2 | NAG | C | 652 | 66.001 | 127.025 | 55.952 | 1.00 | 100.00 | C |
| ATOM | 5208 | C7 | NAG | C | 652 | 64.979 | 127.252 | 56.776 | 1.00 | 100.00 | C |
| ATOM | 5209 | O7 | NAG | C | 652 | 63.857 | 127.557 | 56.375 | 1.00 | 100.00 | C |
| ATOM | 5210 | C8 | NAG | C | 652 | 65.241 | 127.124 | 58.273 | 1.00 | 100.00 | C |
| ATOM | 5211 | C3 | NAG | C | 652 | 67.208 | 129.029 | 56.708 | 1.00 | 100.00 | C |
| ATOM | 5212 | O3 | NAG | C | 652 | 67.940 | 128.302 | 57.686 | 1.00 | 100.00 | C |
| ATOM | 5213 | C4 | NAG | C | 652 | 68.033 | 130.221 | 56.226 | 1.00 | 100.00 | C |
| ATOM | 5214 | O4 | NAG | C | 652 | 68.262 | 131.117 | 57.305 | 1.00 | 100.00 | C |
| ATOM | 5215 | C5 | NAG | C | 652 | 67.294 | 130.946 | 55.098 | 1.00 | 100.00 | C |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|----|-----|---|-----|---------|---------|---------|------|--------|---|
| ATOM | 5216 | O5 | NAG | C | 652 | 67.011 | 130.026 | 54.016 | 1.00 | 100.00 | C |
| ATOM | 5217 | C6 | NAG | C | 652 | 68.116 | 132.089 | 54.523 | 1.00 | 100.00 | C |
| ATOM | 5218 | O6 | NAG | C | 652 | 67.664 | 132.452 | 53.228 | 1.00 | 100.00 | C |
| ATOM | 5219 | C1 | NAG | D | 651 | 103.058 | 89.882 | -9.969 | 1.00 | 74.98 | D |
| ATOM | 5220 | C2 | NAG | D | 651 | 104.475 | 90.371 | -10.345 | 1.00 | 74.98 | D |
| ATOM | 5221 | N2 | NAG | D | 651 | 105.467 | 89.307 | -10.332 | 1.00 | 74.98 | D |
| ATOM | 5222 | C7 | NAG | D | 651 | 105.744 | 88.620 | -9.224 | 1.00 | 74.98 | D |
| ATOM | 5223 | O7 | NAG | D | 651 | 105.839 | 89.134 | -8.096 | 1.00 | 74.98 | D |
| ATOM | 5224 | C8 | NAG | D | 651 | 105.958 | 87.122 | -9.400 | 1.00 | 74.98 | D |
| ATOM | 5225 | C3 | NAG | D | 651 | 104.892 | 91.520 | -9.434 | 1.00 | 74.98 | D |
| ATOM | 5226 | O3 | NAG | D | 651 | 106.198 | 91.964 | -9.777 | 1.00 | 74.98 | D |
| ATOM | 5227 | C4 | NAG | D | 651 | 103.883 | 92.641 | -9.633 | 1.00 | 74.98 | D |
| ATOM | 5228 | O4 | NAG | D | 651 | 104.247 | 93.792 | -8.844 | 1.00 | 74.98 | D |
| ATOM | 5229 | C5 | NAG | D | 651 | 102.478 | 92.135 | -9.255 | 1.00 | 74.98 | D |
| ATOM | 5230 | O5 | NAG | D | 651 | 102.119 | 90.979 | -10.064 | 1.00 | 74.98 | D |
| ATOM | 5231 | C6 | NAG | D | 651 | 101.402 | 93.189 | -9.485 | 1.00 | 74.98 | D |
| ATOM | 5232 | O6 | NAG | D | 651 | 101.461 | 93.661 | -10.848 | 1.00 | 74.98 | D |
| ATOM | 5233 | C1 | NAG | D | 652 | 104.420 | 94.982 | -9.546 | 1.00 | 98.85 | D |
| ATOM | 5234 | C2 | NAG | D | 652 | 104.427 | 96.163 | -8.568 | 1.00 | 98.85 | D |
| ATOM | 5235 | N2 | NAG | D | 652 | 103.145 | 96.270 | -7.902 | 1.00 | 98.85 | D |
| ATOM | 5236 | C7 | NAG | D | 652 | 102.875 | 95.490 | -6.862 | 1.00 | 98.85 | D |
| ATOM | 5237 | O7 | NAG | D | 652 | 103.723 | 95.171 | -6.025 | 1.00 | 98.85 | D |
| ATOM | 5238 | C8 | NAG | D | 652 | 101.452 | 94.977 | -6.736 | 1.00 | 98.85 | D |
| ATOM | 5239 | C3 | NAG | D | 652 | 104.737 | 97.466 | -9.310 | 1.00 | 98.85 | D |
| ATOM | 5240 | O3 | NAG | D | 652 | 104.833 | 98.534 | -8.381 | 1.00 | 98.85 | D |
| ATOM | 5241 | C4 | NAG | D | 652 | 106.052 | 97.324 | -10.071 | 1.00 | 98.85 | D |
| ATOM | 5242 | O4 | NAG | D | 652 | 106.312 | 98.509 | -10.814 | 1.00 | 98.85 | D |
| ATOM | 5243 | C5 | NAG | D | 652 | 105.953 | 96.118 | -11.013 | 1.00 | 98.85 | D |
| ATOM | 5244 | O5 | NAG | D | 652 | 105.674 | 94.916 | -10.251 | 1.00 | 98.85 | D |
| ATOM | 5245 | C6 | NAG | D | 652 | 107.225 | 95.871 | -11.810 | 1.00 | 98.85 | D |
| ATOM | 5246 | O6 | NAG | D | 652 | 108.386 | 96.125 | -11.032 | 1.00 | 98.85 | D |
| ATOM | 5247 | C1 | FUC | A | 653 | 63.367 | 89.618 | 25.052 | 1.00 | 70.32 | A |
| ATOM | 5248 | C2 | FUC | A | 653 | 62.115 | 88.863 | 25.509 | 1.00 | 70.32 | A |
| ATOM | 5249 | O2 | FUC | A | 653 | 62.157 | 88.688 | 26.918 | 1.00 | 70.32 | A |
| ATOM | 5250 | C3 | FUC | A | 653 | 60.856 | 89.646 | 25.132 | 1.00 | 70.32 | A |
| ATOM | 5251 | O3 | FUC | A | 653 | 59.707 | 88.879 | 25.450 | 1.00 | 70.32 | A |
| ATOM | 5252 | C4 | FUC | A | 653 | 60.850 | 89.986 | 23.639 | 1.00 | 70.32 | A |
| ATOM | 5253 | O4 | FUC | A | 653 | 60.667 | 88.804 | 22.877 | 1.00 | 70.32 | A |
| ATOM | 5254 | C5 | FUC | A | 653 | 62.166 | 90.672 | 23.234 | 1.00 | 70.32 | A |
| ATOM | 5255 | O5 | FUC | A | 653 | 63.300 | 89.875 | 23.649 | 1.00 | 70.32 | A |
| ATOM | 5256 | C6 | FUC | A | 653 | 62.282 | 90.868 | 21.734 | 1.00 | 70.32 | A |
| ATOM | 5257 | C1 | FUC | C | 653 | 62.005 | 129.498 | 55.033 | 1.00 | 71.31 | C |
| ATOM | 5258 | C2 | FUC | C | 653 | 62.082 | 131.004 | 55.367 | 1.00 | 71.31 | C |
| ATOM | 5259 | O2 | FUC | C | 653 | 63.420 | 131.466 | 55.253 | 1.00 | 71.31 | C |
| ATOM | 5260 | C3 | FUC | C | 653 | 61.176 | 131.788 | 54.416 | 1.00 | 71.31 | C |
| ATOM | 5261 | O3 | FUC | C | 653 | 61.234 | 133.176 | 54.705 | 1.00 | 71.31 | C |
| ATOM | 5262 | C4 | FUC | C | 653 | 59.751 | 131.272 | 54.572 | 1.00 | 71.31 | C |
| ATOM | 5263 | O4 | FUC | C | 653 | 59.330 | 131.451 | 55.920 | 1.00 | 71.31 | C |
| ATOM | 5264 | C5 | FUC | C | 653 | 59.734 | 129.781 | 54.214 | 1.00 | 71.31 | C |
| ATOM | 5265 | O5 | FUC | C | 653 | 60.646 | 129.049 | 55.072 | 1.00 | 71.31 | C |
| ATOM | 5266 | C6 | FUC | C | 653 | 58.364 | 129.152 | 54.372 | 1.00 | 71.31 | C |
| ATOM | 5267 | C1 | FUC | D | 653 | 100.642 | 94.777 | -11.078 | 1.00 | 71.23 | D |
| ATOM | 5268 | C2 | FUC | D | 653 | 101.026 | 95.446 | -12.409 | 1.00 | 71.23 | D |
| ATOM | 5269 | O2 | FUC | D | 653 | 102.420 | 95.729 | -12.432 | 1.00 | 71.23 | D |
| ATOM | 5270 | C3 | FUC | D | 653 | 100.660 | 94.525 | -13.578 | 1.00 | 71.23 | D |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|---------|---------|------|--------|---|
| ATOM | 5271 | O3 | FUC | D | 653 | 100.963 | 95.158 | -14.814 | 1.00 | 71.23 | D |
| ATOM | 5272 | C4 | FUC | D | 653 | 99.170 | 94.171 | -13.518 | 1.00 | 71.23 | D |
| ATOM | 5273 | O4 | FUC | D | 653 | 98.381 | 95.335 | -13.727 | 1.00 | 71.23 | D |
| ATOM | 5274 | C5 | FUC | D | 653 | 98.836 | 93.557 | -12.154 | 1.00 | 71.23 | D |
| ATOM | 5275 | O5 | FUC | D | 653 | 99.251 | 94.443 | -11.083 | 1.00 | 71.23 | D |
| ATOM | 5276 | C6 | FUC | D | 653 | 97.349 | 93.319 | -11.988 | 1.00 | 71.23 | D |
| ATOM | 5277 | S | SO4 | S | 290 | 87.269 | 114.471 | 20.201 | 1.00 | 56.53 | S |
| ATOM | 5278 | O1 | SO4 | S | 290 | 87.763 | 114.116 | 18.855 | 1.00 | 56.53 | S |
| ATOM | 5279 | O2 | SO4 | S | 290 | 85.981 | 113.803 | 20.472 | 1.00 | 56.53 | S |
| ATOM | 5280 | O3 | SO4 | S | 290 | 87.066 | 115.930 | 20.260 | 1.00 | 56.53 | S |
| ATOM | 5281 | O4 | SO4 | S | 290 | 88.255 | 114.036 | 21.209 | 1.00 | 56.53 | S |
| ATOM | 5282 | S | SO4 | S | 291 | 65.177 | 99.186 | 80.678 | 1.00 | 100.00 | S |
| ATOM | 5283 | O1 | SO4 | S | 291 | 63.867 | 99.855 | 80.809 | 1.00 | 100.00 | S |
| ATOM | 5284 | O2 | SO4 | S | 291 | 64.972 | 97.810 | 80.181 | 1.00 | 100.00 | S |
| ATOM | 5285 | O3 | SO4 | S | 291 | 65.834 | 99.154 | 81.999 | 1.00 | 100.00 | S |
| ATOM | 5286 | O4 | SO4 | S | 291 | 66.036 | 99.927 | 79.733 | 1.00 | 100.00 | S |
| ATOM | 5287 | S | SO4 | S | 292 | 64.193 | 99.447 | 37.657 | 1.00 | 60.46 | S |
| ATOM | 5288 | O1 | SO4 | S | 292 | 65.362 | 98.575 | 37.866 | 1.00 | 60.46 | S |
| ATOM | 5289 | O2 | SO4 | S | 292 | 63.121 | 99.042 | 38.580 | 1.00 | 60.46 | S |
| ATOM | 5290 | O3 | SO4 | S | 292 | 63.707 | 99.332 | 36.270 | 1.00 | 60.46 | S |
| ATOM | 5291 | O4 | SO4 | S | 292 | 64.581 | 100.841 | 37.921 | 1.00 | 60.46 | S |
| ATOM | 5292 | S | SO4 | S | 293 | 98.600 | 73.817 | 16.564 | 1.00 | 49.60 | S |
| ATOM | 5293 | O1 | SO4 | S | 293 | 99.493 | 74.314 | 17.627 | 1.00 | 49.60 | S |
| ATOM | 5294 | O2 | SO4 | S | 293 | 97.218 | 74.226 | 16.862 | 1.00 | 49.60 | S |
| ATOM | 5295 | O3 | SO4 | S | 293 | 98.678 | 72.341 | 16.514 | 1.00 | 49.60 | S |
| ATOM | 5296 | O4 | SO4 | S | 293 | 99.000 | 74.391 | 15.270 | 1.00 | 49.60 | S |
| ATOM | 5297 | S | SO4 | S | 294 | 80.532 | 120.977 | 15.256 | 1.00 | 99.04 | S |
| ATOM | 5298 | O1 | SO4 | S | 294 | 81.699 | 121.011 | 16.163 | 1.00 | 99.04 | S |
| ATOM | 5299 | O2 | SO4 | S | 294 | 80.210 | 122.351 | 14.830 | 1.00 | 99.04 | S |
| ATOM | 5300 | O3 | SO4 | S | 294 | 79.358 | 120.395 | 15.944 | 1.00 | 99.04 | S |
| ATOM | 5301 | O4 | SO4 | S | 294 | 80.877 | 120.171 | 14.069 | 1.00 | 99.04 | S |
| ATOM | 5302 | S | SO4 | S | 295 | 58.950 | 102.740 | 88.312 | 1.00 | 100.00 | S |
| ATOM | 5303 | O1 | SO4 | S | 295 | 59.842 | 102.968 | 87.152 | 1.00 | 100.00 | S |
| ATOM | 5304 | O2 | SO4 | S | 295 | 59.774 | 102.431 | 89.502 | 1.00 | 100.00 | S |
| ATOM | 5305 | O3 | SO4 | S | 295 | 58.041 | 101.603 | 88.032 | 1.00 | 100.00 | S |
| ATOM | 5306 | O4 | SO4 | S | 295 | 58.149 | 103.959 | 88.562 | 1.00 | 100.00 | S |
| ATOM | 5307 | S | SO4 | S | 296 | 57.564 | 103.837 | 30.030 | 1.00 | 100.00 | S |
| ATOM | 5308 | O1 | SO4 | S | 296 | 58.893 | 103.618 | 29.431 | 1.00 | 100.00 | S |
| ATOM | 5309 | O2 | SO4 | S | 296 | 56.598 | 104.166 | 28.960 | 1.00 | 100.00 | S |
| ATOM | 5310 | O3 | SO4 | S | 296 | 57.633 | 104.962 | 30.989 | 1.00 | 100.00 | S |
| ATOM | 5311 | O4 | SO4 | S | 296 | 57.134 | 102.604 | 30.726 | 1.00 | 100.00 | S |
| ATOM | 5312 | S | SO4 | S | 297 | 96.037 | 65.451 | 9.537 | 1.00 | 90.21 | S |
| ATOM | 5313 | O1 | SO4 | S | 297 | 97.355 | 64.786 | 9.509 | 1.00 | 90.21 | S |
| ATOM | 5314 | O2 | SO4 | S | 297 | 96.063 | 66.627 | 8.645 | 1.00 | 90.21 | S |
| ATOM | 5315 | O3 | SO4 | S | 297 | 95.715 | 65.864 | 10.919 | 1.00 | 90.21 | S |
| ATOM | 5316 | O4 | SO4 | S | 297 | 95.007 | 64.512 | 9.057 | 1.00 | 90.21 | S |
| ATOM | 5317 | OH2 | WAT | W | 1 | 98.243 | 72.793 | 8.778 | 1.00 | 40.14 | W |
| ATOM | 5318 | OH2 | WAT | W | 2 | 100.723 | 99.069 | 1.343 | 1.00 | 43.74 | W |
| ATOM | 5319 | OH2 | WAT | W | 3 | 82.241 | 105.217 | 19.713 | 1.00 | 28.74 | W |
| ATOM | 5320 | OH2 | WAT | W | 4 | 75.884 | 89.321 | 17.720 | 1.00 | 28.05 | W |
| ATOM | 5321 | OH2 | WAT | W | 5 | 93.183 | 80.024 | 16.428 | 1.00 | 24.14 | W |
| ATOM | 5322 | OH2 | WAT | W | 6 | 77.336 | 105.675 | 24.395 | 1.00 | 32.73 | W |
| ATOM | 5323 | OH2 | WAT | W | 7 | 69.995 | 85.178 | 19.215 | 1.00 | 45.10 | W |
| ATOM | 5324 | OH2 | WAT | W | 8 | 72.713 | 111.831 | 18.813 | 1.00 | 28.44 | W |
| ATOM | 5325 | OH2 | WAT | W | 9 | 70.462 | 97.602 | 28.514 | 1.00 | 38.75 | W |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|---------|---------|---------|------|-------|---|
| ATOM | 5326 | OH2 | WAT | W | 10 | 81.728 | 86.681 | -4.948 | 1.00 | 46.77 | W |
| ATOM | 5327 | OH2 | WAT | W | 11 | 46.060 | 107.671 | 59.577 | 1.00 | 64.17 | W |
| ATOM | 5328 | OH2 | WAT | W | 12 | 84.139 | 88.047 | 23.458 | 1.00 | 64.93 | W |
| ATOM | 5329 | OH2 | WAT | W | 13 | 60.994 | 118.607 | 32.498 | 1.00 | 45.07 | W |
| ATOM | 5330 | OH2 | WAT | W | 14 | 65.151 | 112.020 | 43.183 | 1.00 | 38.22 | W |
| ATOM | 5331 | OH2 | WAT | W | 15 | 101.436 | 76.882 | 21.919 | 1.00 | 43.89 | W |
| ATOM | 5332 | OH2 | WAT | W | 16 | 70.692 | 82.671 | 2.951 | 1.00 | 39.40 | W |
| ATOM | 5333 | OH2 | WAT | W | 17 | 77.880 | 90.837 | 6.039 | 1.00 | 45.30 | W |
| ATOM | 5334 | OH2 | WAT | W | 18 | 53.388 | 120.527 | 54.360 | 1.00 | 32.92 | W |
| ATOM | 5335 | OH2 | WAT | W | 19 | 88.455 | 87.041 | 22.408 | 1.00 | 48.72 | W |
| ATOM | 5336 | OH2 | WAT | W | 20 | 62.755 | 109.918 | 29.364 | 1.00 | 45.86 | W |
| ATOM | 5337 | OH2 | WAT | W | 21 | 101.357 | 76.280 | 16.232 | 1.00 | 31.46 | W |
| ATOM | 5338 | OH2 | WAT | W | 22 | 80.811 | 81.779 | -1.444 | 1.00 | 45.90 | W |
| ATOM | 5339 | OH2 | WAT | W | 23 | 54.512 | 121.498 | 52.129 | 1.00 | 43.52 | W |
| ATOM | 5340 | OH2 | WAT | W | 24 | 95.558 | 95.007 | -15.047 | 1.00 | 62.31 | W |
| ATOM | 5341 | OH2 | WAT | W | 25 | 70.709 | 120.756 | 37.731 | 1.00 | 47.56 | W |
| ATOM | 5342 | OH2 | WAT | W | 26 | 58.731 | 102.298 | 42.435 | 1.00 | 40.62 | W |
| ATOM | 5343 | OH2 | WAT | W | 27 | 102.361 | 62.548 | 12.953 | 1.00 | 50.77 | W |
| ATOM | 5344 | OH2 | WAT | W | 28 | 111.776 | 66.358 | 13.734 | 1.00 | 35.34 | W |
| ATOM | 5345 | OH2 | WAT | W | 29 | 89.104 | 92.829 | 16.621 | 1.00 | 40.61 | W |
| ATOM | 5346 | OH2 | WAT | W | 30 | 43.225 | 109.666 | 46.636 | 1.00 | 54.75 | W |
| ATOM | 5347 | OH2 | WAT | W | 31 | 67.323 | 94.804 | 16.042 | 1.00 | 38.16 | W |
| ATOM | 5348 | OH2 | WAT | W | 32 | 59.324 | 121.006 | 34.693 | 1.00 | 43.79 | W |
| ATOM | 5349 | OH2 | WAT | W | 33 | 82.453 | 77.000 | 9.480 | 1.00 | 54.51 | W |
| ATOM | 5350 | OH2 | WAT | W | 34 | 95.982 | 100.629 | 12.897 | 1.00 | 47.38 | W |
| ATOM | 5351 | OH2 | WAT | W | 35 | 54.160 | 113.078 | 74.080 | 1.00 | 63.51 | W |
| ATOM | 5352 | OH2 | WAT | W | 36 | 68.861 | 92.681 | 14.691 | 1.00 | 36.90 | W |
| ATOM | 5353 | OH2 | WAT | W | 37 | 96.636 | 81.840 | 10.110 | 1.00 | 25.09 | W |
| ATOM | 5354 | OH2 | WAT | W | 38 | 108.927 | 91.327 | 8.447 | 1.00 | 44.64 | W |
| ATOM | 5355 | OH2 | WAT | W | 39 | 80.800 | 92.167 | 3.134 | 1.00 | 51.75 | W |
| ATOM | 5356 | OH2 | WAT | W | 40 | 91.129 | 102.744 | 28.200 | 1.00 | 37.60 | W |
| ATOM | 5357 | OH2 | WAT | W | 41 | 79.061 | 91.827 | -0.696 | 1.00 | 39.58 | W |
| ATOM | 5358 | OH2 | WAT | W | 42 | 55.591 | 110.935 | 65.257 | 1.00 | 61.81 | W |
| ATOM | 5359 | OH2 | WAT | W | 43 | 88.416 | 107.977 | 9.153 | 1.00 | 40.78 | W |
| ATOM | 5360 | OH2 | WAT | W | 44 | 49.615 | 85.837 | 59.269 | 1.00 | 58.95 | W |
| ATOM | 5361 | OH2 | WAT | W | 45 | 88.447 | 107.397 | 16.191 | 1.00 | 33.70 | W |
| ATOM | 5362 | OH2 | WAT | W | 46 | 62.234 | 106.156 | 45.413 | 1.00 | 36.64 | W |
| ATOM | 5363 | OH2 | WAT | W | 47 | 76.054 | 93.988 | 16.647 | 1.00 | 28.00 | W |
| ATOM | 5364 | OH2 | WAT | W | 48 | 61.293 | 106.411 | 36.257 | 1.00 | 38.13 | W |
| ATOM | 5365 | OH2 | WAT | W | 49 | 84.935 | 101.229 | 8.292 | 1.00 | 37.11 | W |
| ATOM | 5366 | OH2 | WAT | W | 50 | 73.442 | 104.943 | 26.714 | 1.00 | 37.40 | W |
| ATOM | 5367 | OH2 | WAT | W | 51 | 62.168 | 109.685 | 18.951 | 1.00 | 58.71 | W |
| ATOM | 5368 | OH2 | WAT | W | 52 | 86.134 | 99.036 | 9.586 | 1.00 | 39.95 | W |
| ATOM | 5369 | OH2 | WAT | W | 53 | 53.297 | 114.656 | 43.291 | 1.00 | 34.32 | W |
| ATOM | 5370 | OH2 | WAT | W | 54 | 91.965 | 91.169 | 2.028 | 1.00 | 28.84 | W |
| ATOM | 5371 | OH2 | WAT | W | 55 | 68.554 | 106.631 | 38.047 | 1.00 | 29.96 | W |
| ATOM | 5372 | OH2 | WAT | W | 56 | 42.275 | 117.236 | 51.563 | 1.00 | 55.68 | W |
| ATOM | 5373 | OH2 | WAT | W | 57 | 78.710 | 113.956 | 1.464 | 1.00 | 52.50 | W |
| ATOM | 5374 | OH2 | WAT | W | 58 | 67.208 | 114.504 | 23.283 | 1.00 | 43.10 | W |
| ATOM | 5375 | OH2 | WAT | W | 59 | 82.994 | 99.681 | 31.729 | 1.00 | 48.60 | W |
| ATOM | 5376 | OH2 | WAT | W | 60 | 65.200 | 109.879 | 24.059 | 1.00 | 60.10 | W |
| ATOM | 5377 | OH2 | WAT | W | 61 | 97.040 | 73.278 | 2.059 | 1.00 | 45.25 | W |
| ATOM | 5378 | OH2 | WAT | W | 62 | 93.225 | 99.035 | -5.528 | 1.00 | 49.05 | W |
| ATOM | 5379 | OH2 | WAT | W | 63 | 71.875 | 100.135 | 3.573 | 1.00 | 46.15 | W |
| ATOM | 5380 | OH2 | WAT | W | 64 | 62.928 | 104.236 | 22.446 | 1.00 | 52.64 | W |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|
| ATOM | 5381 | OH2 | WAT | W | 65 | 44.217 | 112.617 | 48.777 | 1.00 | 48.56 | W |
| ATOM | 5382 | OH2 | WAT | W | 66 | 93.228 | 67.203 | 7.652 | 1.00 | 41.59 | W |
| ATOM | 5383 | OH2 | WAT | W | 67 | 77.650 | 103.578 | 32.499 | 1.00 | 40.82 | W |
| ATOM | 5384 | OH2 | WAT | W | 68 | 91.335 | 94.124 | 22.779 | 1.00 | 59.93 | W |
| ATOM | 5385 | OH2 | WAT | W | 69 | 48.083 | 109.798 | 59.363 | 1.00 | 57.31 | W |
| ATOM | 5386 | OH2 | WAT | W | 70 | 58.427 | 112.971 | 36.462 | 1.00 | 34.49 | W |
| ATOM | 5387 | OH2 | WAT | W | 71 | 103.742 | 87.373 | 18.534 | 1.00 | 41.96 | W |
| ATOM | 5388 | OH2 | WAT | W | 72 | 83.955 | 83.619 | 7.649 | 1.00 | 36.86 | W |
| ATOM | 5389 | OH2 | WAT | W | 73 | 105.879 | 85.929 | 18.515 | 1.00 | 58.34 | W |
| ATOM | 5390 | OH2 | WAT | W | 74 | 73.385 | 114.693 | 44.497 | 1.00 | 50.73 | W |
| ATOM | 5391 | OH2 | WAT | W | 75 | 90.898 | 81.250 | 21.569 | 1.00 | 53.51 | W |
| ATOM | 5392 | OH2 | WAT | W | 76 | 93.172 | 77.536 | 12.194 | 1.00 | 34.23 | W |
| ATOM | 5393 | OH2 | WAT | W | 77 | 71.336 | 105.163 | 13.459 | 1.00 | 39.65 | W |
| ATOM | 5394 | OH2 | WAT | W | 78 | 94.872 | 75.387 | 12.718 | 1.00 | 27.22 | W |
| ATOM | 5395 | OH2 | WAT | W | 79 | 79.491 | 113.953 | 19.501 | 1.00 | 41.09 | W |
| ATOM | 5396 | OH2 | WAT | W | 80 | 73.163 | 112.199 | 16.131 | 1.00 | 31.19 | W |
| ATOM | 5397 | OH2 | WAT | W | 81 | 81.906 | 111.926 | 26.496 | 1.00 | 33.98 | W |
| ATOM | 5398 | OH2 | WAT | W | 82 | 70.470 | 89.549 | 20.238 | 1.00 | 40.29 | W |
| ATOM | 5399 | OH2 | WAT | W | 83 | 93.047 | 104.689 | 7.488 | 1.00 | 48.34 | W |
| ATOM | 5400 | OH2 | WAT | W | 84 | 104.406 | 76.662 | 11.032 | 1.00 | 29.83 | W |
| ATOM | 5401 | OH2 | WAT | W | 85 | 84.174 | 109.256 | 15.552 | 1.00 | 28.81 | W |
| ATOM | 5402 | OH2 | WAT | W | 86 | 90.192 | 90.721 | -5.640 | 1.00 | 54.35 | W |
| ATOM | 5403 | OH2 | WAT | W | 87 | 85.476 | 86.441 | 12.601 | 1.00 | 30.66 | W |
| ATOM | 5404 | OH2 | WAT | W | 88 | 67.390 | 95.645 | 3.293 | 1.00 | 44.86 | W |
| ATOM | 5405 | OH2 | WAT | W | 89 | 102.338 | 75.732 | 13.813 | 1.00 | 41.56 | W |
| ATOM | 5406 | OH2 | WAT | W | 90 | 92.271 | 95.700 | 0.716 | 1.00 | 36.78 | W |
| ATOM | 5407 | OH2 | WAT | W | 91 | 82.997 | 77.296 | 6.765 | 1.00 | 38.94 | W |
| ATOM | 5408 | OH2 | WAT | W | 92 | 67.517 | 83.159 | 2.651 | 1.00 | 50.39 | W |
| ATOM | 5409 | OH2 | WAT | W | 93 | 101.590 | 81.432 | 5.335 | 1.00 | 32.29 | W |
| ATOM | 5410 | OH2 | WAT | W | 94 | 61.174 | 108.116 | 16.606 | 1.00 | 41.44 | W |
| ATOM | 5411 | OH2 | WAT | W | 95 | 64.720 | 114.974 | 12.791 | 1.00 | 44.59 | W |
| ATOM | 5412 | OH2 | WAT | W | 96 | 78.195 | 117.163 | 28.367 | 1.00 | 40.57 | W |
| ATOM | 5413 | OH2 | WAT | W | 97 | 57.717 | 114.079 | 55.035 | 1.00 | 36.92 | W |
| ATOM | 5414 | OH2 | WAT | W | 98 | 67.044 | 100.744 | 39.547 | 1.00 | 51.71 | W |
| ATOM | 5415 | OH2 | WAT | W | 99 | 92.153 | 88.819 | -6.463 | 1.00 | 42.00 | W |
| ATOM | 5416 | OH2 | WAT | W | 100 | 83.503 | 119.049 | 18.338 | 1.00 | 39.68 | W |
| ATOM | 5417 | OH2 | WAT | W | 101 | 84.247 | 111.886 | 16.564 | 1.00 | 34.46 | W |
| ATOM | 5418 | OH2 | WAT | W | 102 | 84.120 | 114.466 | 15.058 | 1.00 | 46.29 | W |
| ATOM | 5419 | OH2 | WAT | W | 103 | 78.739 | 92.710 | 1.767 | 1.00 | 53.05 | W |
| ATOM | 5420 | OH2 | WAT | W | 104 | 75.383 | 119.594 | 22.530 | 1.00 | 45.72 | W |
| ATOM | 5421 | OH2 | WAT | W | 105 | 97.340 | 99.403 | 8.650 | 1.00 | 59.09 | W |
| ATOM | 5422 | OH2 | WAT | W | 106 | 60.487 | 98.834 | 45.196 | 1.00 | 48.04 | W |
| ATOM | 5423 | OH2 | WAT | W | 107 | 81.895 | 97.296 | 33.308 | 1.00 | 53.41 | W |
| ATOM | 5424 | OH2 | WAT | W | 108 | 61.463 | 106.999 | 18.809 | 1.00 | 46.26 | W |
| ATOM | 5425 | OH2 | WAT | W | 109 | 103.807 | 87.900 | 14.867 | 1.00 | 42.52 | W |
| ATOM | 5426 | OH2 | WAT | W | 110 | 61.631 | 121.926 | 36.087 | 1.00 | 57.28 | W |
| ATOM | 5427 | OH2 | WAT | W | 111 | 80.906 | 98.367 | 7.256 | 1.00 | 39.55 | W |
| ATOM | 5428 | OH2 | WAT | W | 112 | 84.738 | 112.744 | 24.379 | 1.00 | 37.45 | W |
| ATOM | 5429 | OH2 | WAT | W | 113 | 97.371 | 95.058 | 17.386 | 1.00 | 45.28 | W |
| ATOM | 5430 | OH2 | WAT | W | 114 | 85.143 | 89.014 | 11.475 | 1.00 | 46.64 | W |
| ATOM | 5431 | OH2 | WAT | W | 115 | 91.391 | 78.713 | -1.122 | 1.00 | 25.77 | W |
| ATOM | 5432 | OH2 | WAT | W | 116 | 103.551 | 81.877 | 1.731 | 1.00 | 50.24 | W |
| ATOM | 5433 | OH2 | WAT | W | 117 | 43.228 | 107.507 | 36.707 | 1.00 | 52.06 | W |
| ATOM | 5434 | OH2 | WAT | W | 118 | 93.991 | 67.254 | 13.175 | 1.00 | 55.01 | W |
| ATOM | 5435 | OH2 | WAT | W | 119 | 47.508 | 104.474 | 44.657 | 1.00 | 42.36 | W |

WO 02/24722

PCT/IL01/00871

FIGURE 2 Continued

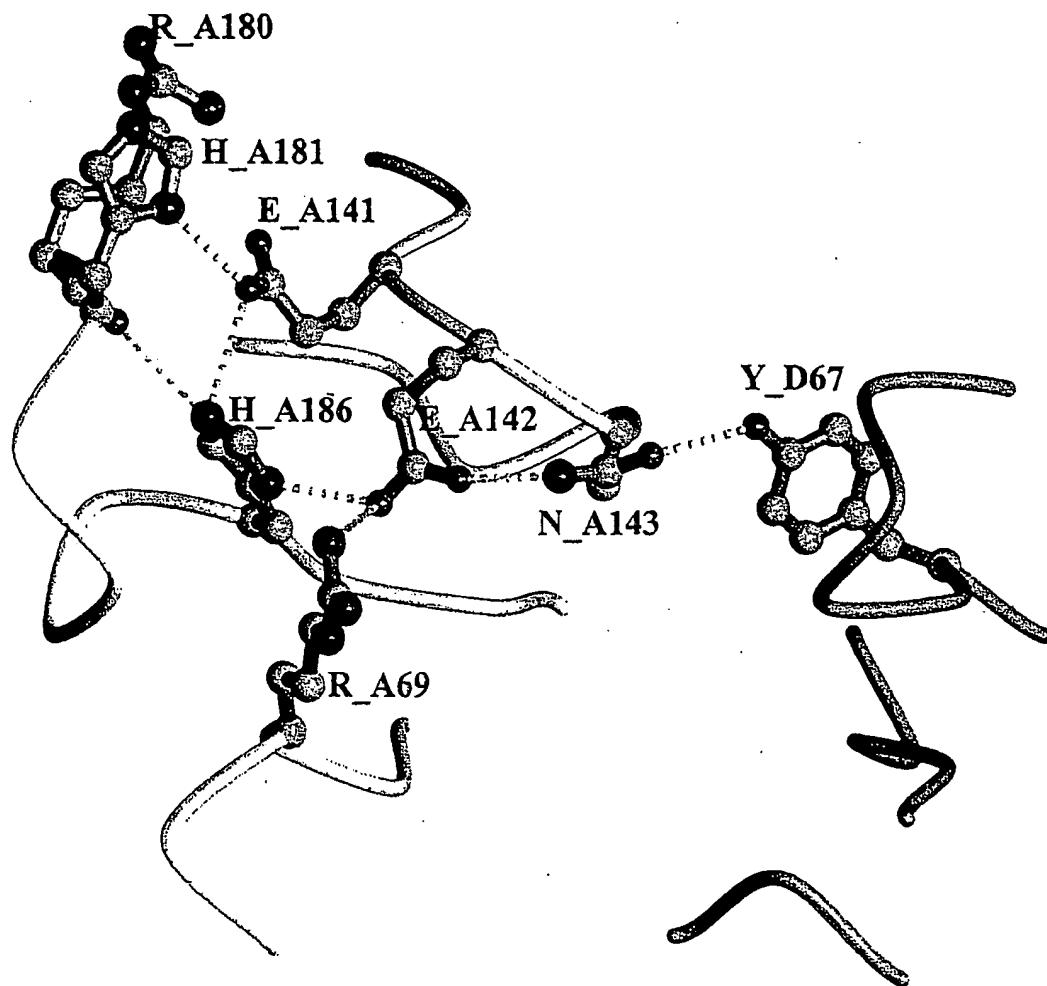
| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|---------|---------|--------|------|-------|---|
| ATOM | 5436 | OH2 | WAT | W | 120 | 93.716 | 103.969 | 19.726 | 1.00 | 48.72 | W |
| ATOM | 5437 | OH2 | WAT | W | 121 | 96.426 | 74.427 | -6.268 | 1.00 | 40.69 | W |
| ATOM | 5438 | OH2 | WAT | W | 122 | 92.951 | 102.931 | 2.648 | 1.00 | 49.76 | W |
| ATOM | 5439 | OH2 | WAT | W | 123 | 52.043 | 107.168 | 67.763 | 1.00 | 55.50 | W |
| ATOM | 5440 | OH2 | WAT | W | 124 | 94.885 | 68.428 | 15.049 | 1.00 | 52.06 | W |
| ATOM | 5441 | OH2 | WAT | W | 125 | 94.068 | 106.686 | 14.846 | 1.00 | 51.39 | W |
| ATOM | 5442 | OH2 | WAT | W | 126 | 69.295 | 109.470 | 32.249 | 1.00 | 40.55 | W |
| ATOM | 5443 | OH2 | WAT | W | 127 | 50.780 | 105.242 | 50.558 | 1.00 | 54.72 | W |
| ATOM | 5444 | OH2 | WAT | W | 128 | 76.875 | 87.787 | 26.823 | 1.00 | 29.07 | W |
| ATOM | 5445 | OH2 | WAT | W | 129 | 83.439 | 85.902 | 7.118 | 1.00 | 30.78 | W |
| ATOM | 5446 | OH2 | WAT | W | 130 | 93.888 | 72.716 | 13.851 | 1.00 | 44.58 | W |
| ATOM | 5447 | OH2 | WAT | W | 131 | 70.603 | 103.872 | 36.649 | 1.00 | 49.76 | W |
| ATOM | 5448 | OH2 | WAT | W | 132 | 95.627 | 71.658 | 15.900 | 1.00 | 47.50 | W |
| ATOM | 5449 | OH2 | WAT | W | 133 | 90.727 | 109.854 | 24.313 | 1.00 | 37.36 | W |
| ATOM | 5450 | OH2 | WAT | W | 134 | 66.795 | 109.939 | 62.274 | 1.00 | 60.58 | W |
| ATOM | 5451 | OH2 | WAT | W | 135 | 74.204 | 77.679 | 2.581 | 1.00 | 60.35 | W |
| ATOM | 5452 | OH2 | WAT | W | 136 | 82.625 | 107.558 | 4.030 | 1.00 | 40.37 | W |
| ATOM | 5453 | OH2 | WAT | W | 137 | 72.941 | 97.648 | 39.459 | 1.00 | 48.32 | W |
| ATOM | 5454 | OH2 | WAT | W | 138 | 60.515 | 81.451 | 72.811 | 1.00 | 60.18 | W |
| ATOM | 5455 | OH2 | WAT | W | 139 | 83.361 | 104.042 | 35.263 | 1.00 | 49.95 | W |
| ATOM | 5456 | OH2 | WAT | W | 140 | 111.952 | 86.558 | 10.762 | 1.00 | 48.42 | W |
| ATOM | 5457 | OH2 | WAT | W | 141 | 77.317 | 110.318 | 45.555 | 1.00 | 59.12 | W |

END

WO 02/24722

PCT/IL01/00871

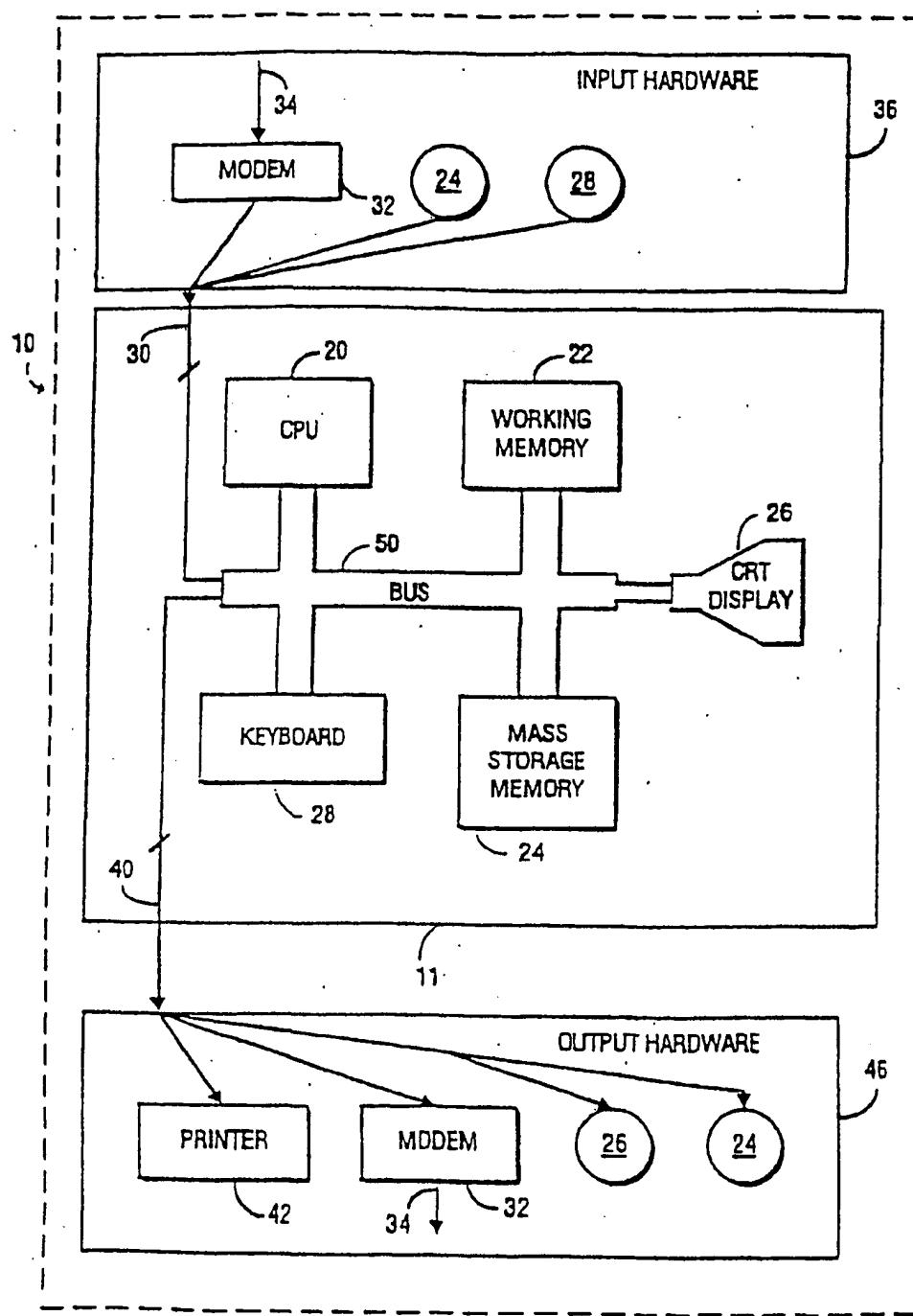
FIGURE 3



WO 02/24722

PCT/IL01/00871

FIGURE 4



WO 02/24722

PCT/IL01/00871

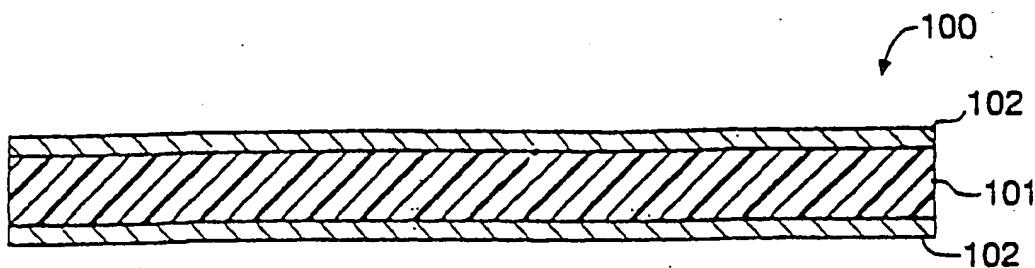


FIGURE 5A

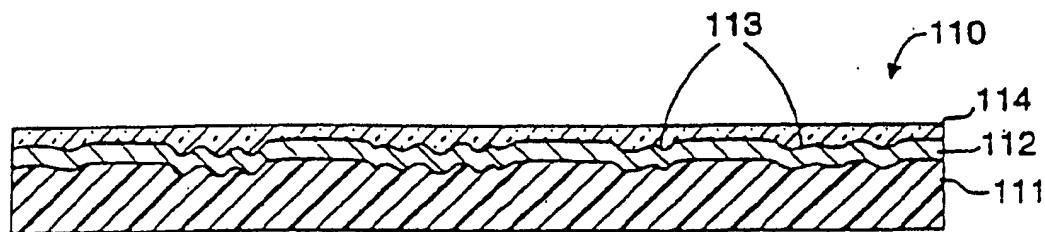


FIGURE 5B

100/100